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**Ariyakulam, Tirunelveli Thoothukudi –High Road, Maharaja Nagar Post,
TIRUNELVELI- 627 011.**

CRITERION I

PG PROECT

2021-2022

DIASPORIC CONCIOUSNESS IN KAVITA DASWANI'S *FOR MATRIMONIAL PURPOSES*

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by

S. ANJU – 2020PEN01

Under the Guidance of

Dr. M. Sivakala, M.A., M.Phil., B.Ed., Ph.D.,

Assistant Professor, Department of English

SRI SARADA COLLEGE FOR WOMEN

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Ariyakulam, Maharaja Nagar Post, Thoothukudi NH,

TIRUNELVELI-627 011, TAMIL NADU, INDIA.

CERTIFICATE

This is to certify that this project titled "DIASPORIC CONCIOUSNESS IN KAVITA DASWANI'S *FOR MATRIMONIAL PURPOSES*" is a bonafide work of S. ANJU of Final Year M.A, English, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of MASTER OF ARTS IN ENGLISH during the academic year 2020- 22.

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HEAD,
P.G. Dept. of English
SADAKATHULLAH APPA COLLEGE
(AUTONOMOUS)
RAHMATH NAGAR, TIRUNELVELI - 627 011.

DECLARATION

I do hereby declare that this project titled **"DIASPORIC CONCIOUSNESS IN KAVITA DASWANI'S *FOR MATRIMONIAL PURPOSES*"** is carried out by myself for the award of the degree of **MASTER OF ARTS IN ENGLISH** is my original work.

(S. ANJU)

Msiraleala/23/12/2021

Signature of the Internal Guide

ACKNOWLEDGEMENT

ABSTRACT

Kavita Daswani is an international journalist covering fashion, beauty, travel, design and celebrities for a range of global publications. She was an Indian-American writer. She has written several novels for grown-ups and adults that represent her passion and love for the Indian culture. In her books we see how young Indian girls are trying to break away from their tradition in pursuit of dreams. She also brings some of her own life's experiences in to her books.

The study aims to examine how **Diasporic Consciousness in Kavita Daswani** for *Matrimonial Purposes* represents the cultural issues and Anju's adoption to the new world.

The first chapter **Introduction** is about Kavita Daswani's early life, her writing career, her concepts, her achievements, etc. her works deal with the diasporic issues. People migrate to other countries for different purposes and their adaption to the new land is deals with the diasporic writers.

The second chapter **Multicultural dilemma in a foreign land** tells about the cultural issues of Anju and her life style. Here Anju's cultural identities come from her own culture in India and her new culture in America.

Following that the third chapter **Cultural Hybridization in Multicultural Joint Ventures** deals with Anju's adoption towards the new world. Kavita Daswani through her novel portrays Anju's character and explained how she adopt to the new world and her sufferings of her host country.

The fourth chapter **Summation** sums up all the preceding chapters.

IDENTITY CRISIS OF 'THE OTHER' IN ARUNDHATI ROY'S

THE MINISTRY OF UTMOST HAPPINESS

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

HAND - HEART - HEAD

Submitted in December 2021 by

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Under the Guidance of

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CERTIFICATE

This is to certify that this project titled 'IDENTITY CRISIS OF 'THE OTHER' IN ARUNDHATI ROY'S *THE MINISTRY OF UTMOST HAPPINESS*' is a bona fide work of M. HARINI of Final Year M.A, English, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of MASTER OF ARTS IN ENGLISH during the academic year 2021- 2022.

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DECLARATION

I do hereby declare that this project titled "**IDENTITY CRISIS OF 'THE OTHER'**
IN ARUNDHATI ROY'S *THE MINISTRY OF UTMOST HAPPINESS***"** is carried out by
myself for the award of the degree of **MASTER OF ARTS IN ENGLISH** is my original
work.

M. Harini

(M. HARINI)

Renukan
23.12.21

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ACKNOWLEDGEMENT

ABSTRACT

Arundhati Roy is one of the most prominent Indian writers in English and is also a social activist.. She is the first Indian writer to receive the Booker Prize, one of the most prestigious awards. Her plays include the harsh reality of life. Arundhati Roy always tries to create a healthy environment for the disadvantaged people.

The Objective of the project is the identity crisis experienced by the transgender – 'the other' and tracing the otherized segments in Arundhati Roy's *The Ministry of Utmost Happiness*.

The project entitled **IDENTITY CRISIS OF 'THE OTHER' IN ARUNDHATI ROY'S** *THE MINISTRY OF UTMOST HAPPINESS* focuses on 'the Other' people in the contemporary India.

The first chapter **Introduction** discusses the emergence of Indian Literature and also a biographical note of Arundhati Roy. It discusses the pioneers in the field of Indian English writing.

The second chapter entitled **'The Other' in a transgender,** elaborately analyses the character of Anjum, a transgender and probes deep into the conflicts faced by thetransgender in society while seeking for identity.

The third chapter **'The Other' in Others** depicts the predicaments faced by the people who are excluded from the society.

The fourth chapter **Summation** sums up all the chapters and speaks about the researcher's findings, suggestions and scope for further research on the novel.

MISCONCEPTION AND SACRIFICE IN
KHALED HOSSEINI'S *THE KITE RUNNER*

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by

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CERTIFICATE

This is to certify that this project work titled 'MISCONCEPTION AND SACRIFICE IN KHALED HOSSEINI'S *THE KITE RUNNER* is a bonafide work of M.JEYALAKSHMI of Final Year M.A English, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF ARTS IN ENGLISH** during the academic year 2021 - 2022.

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RAHMATH NAGAR, TIRUNELVELI - 627 011.

DECLARATION

I do hereby declare that this project work titled **MISCONCEPTION AND SACRIFICE IN KHALED HOSSEINI'S** *THE KITE RUNNER* was carried out by me for the award of the degree of **MASTER OF ENGLISH IN** is my original work.

M.Jeyalakshmi
(M.JEYALAKSHMI)

Signature of the Internal Guide

ABSTRACT

Khaled Hosseini was an Afghan born American novelist who was known for his vivid depictions of Afghanistan. Khaled Hosseini is one of the most recognized and bestselling authors in the world. His books have been published over seventy countries and sold more than 40 million copies worldwide. Hosseini is one of those writers whose works never fails to evoke strong emotions. An Afghan- born writer, he centres on political turmoil in Afghanistan. He is an extremely talented writer. Hosseini gives a voice to these women whose voices have been silenced for decades. He brings awareness to their suffering and gives them the utmost respect whilst doing so. These were rightly deserve novels honour them as mothers, sisters, daughters, wives and human beings in the way that they rightly deserve.

The objective of the novel, *The Kite Runner* is to analyze the friendship between Amir and Hassan; to investigate the reasons of guilty conscience of Amir; to analyze the source for his redemption.

The first chapter **Introduction** discusses about the Afghan- American history, culture and identity. It gives a biographical note about Khaled Hosseini's life, education and his other popular works. The second chapter **Friendship and separation** analyses about the friendship bond of Amir and Hassan that creates a major difference between them. It also tells about Pashtun and Hazaras identity, Pashtun's cruel treatment over Hazaras in Afghanistan. The third chapter **Guilt and Redemption** analyses about Amir's guilt feelings after his betrayal on Hassan. *Amir's*

guilt doesn't allow Amir to live peacefully and tries to redeem himself from his guilt. This chapter highlights Amir's redemption by rescuing Hassan's son Sohrab from the Taliban regime. It also analyses about the psychological aspect of Amir. It also gives about the issues on id, ego, super- ego, Oedipus complex. The fourth chapter **Summation** sums up with the author's note, the overall view of the novel, and tells about the main source of friendship, guilt and redemption which is highlighted throughout the novel

ADUMBRATION OF FEMALE ATTACHMENT IN CHITRA BANERJEE DIVAKARUNI'S *SISTER OF MY HEART*

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by

G. JEYSREE – 2020PEN04

Under the Guidance of

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This is to certify that this project titled **'ADUMBRATION OF FEMALE ATTACHMENT IN CHITRA BANERJEE DIVAKARUNI'S *SISTER OF MY HEART'*** is a bonafide work of G. JEYSREE of Final Year M.A, English, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF ARTS IN ENGLISH** during the academic year 2021 - 22.

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M. Lalith 23/12/21

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RAHMATH NAGAR, TIRUNELVELI - 627 011.

DECLARATION

I do hereby declare that this project titled "**ADUMBRATION OF FEMALE ATTACHEMENT IN CHITRA BANERJEE DIVAKARUNI'S** *SISTER OF MY HEART*" is carried out by myself for the award of the degree of **MASTER OF ARTS IN ENGLISH** is my original work.

G. Jeysree
(G. JEYSREE)

M. Lalith 28/12/21
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ACKNOWLEDGEMENT

ABSTRACT

Chitra Banerjee Divakaruni, a prolific writer who proclaims the significance of women in the family and society through her novels. She brings out the untold feelings of Indian females their dreams and aspiration, their insecure stage in means of things and social forces make them suppress Divakaruni's impetus is to write about a female-centric theme in the South Asian settings and shares the emotions of the protagonists and finds in them a mode of feminist expression.

The objective of the project is to project female bonding impact the lives of the two protagonists and how they keep their bonding throughout their lives. The Project entitled **ADUMBRATION OF FEMALE ATTACHMENT IN CHITRA BANERJEE DIVAKARUNI'S *SISTER OF MY HEART*** highlights the importance of female bonding.

The First chapter **Introduction** deals with the Indian writers and the diasporic writers. It discusses the autobiography of the Chitra Banerjee Divakaruni and her literary works.

The Second chapter **Homosociality and Pyshic Repression** analyses the female bonding between Anju and Sudha and it also discusses the emotional feelings of women.

The Third chapter **Variant Correlations** probes the various linkages of characters, which feels them to secure and comfort in the patriarchal society.

The Fourth chapter **Summation** sums up with author's note and tells about the importance of linkage between characters.

WOMEN'S SUBJUGATION IN AMISH TRIPATHI'S *RAM:*
SCION OF IKSHVAKU

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by

D. MALATHI RANI – 2020PEN05

Under the Guidance of

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TIRUNELVELI - 627 011, TAMIL NADU, INDIA.

CERTIFICATE

This is to certify that this project titled 'WOMEN'S SUBJUGATION IN AMISH

TRIPATHI'S *RAM: SCION OF IKSHVAKU*' is a bonafide work of D. MALATHI RANI

of Final Year M.A English, Sri Sarada College for Women (Autonomous), Tirunelveli -

627011 in partial fulfilment of the requirements for the award of degree of MASTER OF

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SADAKATHULLAH APPA COLLEGE
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DECLARATION

I do hereby declare that this project titled "**WOMEN'S SUBJUGATION IN MISH TRIPATHI** *RAM: SCION OF IKSHVAKU*" is carried out by myself for the award of the degree of **MASTER OF ARTS IN ENGLISH** is my original work

D. Malathi Rani

(D. MALATHI RANI)

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ACKNOWLEDGEMENT

ABSTRACT

This project entitled **WOMEN'S SUBJUGATION IN AMISH TRIPATHI'S** *RAM: SCION OF IKSHVAKU* deals the ill treatment of women in Indian society with the mythical elements. The project explores how Amish Tripathi talks of women of the various types of violence with the mythical characters of *The Ramayana* and also shows how myth is used as a tool to reveal the social evils.

The first chapter of the project introduces the author, Amish Tripathi, and deals with his biography. Amish is Indian's famous novelist on myth. *Ram: Scion of Ikshvaku* is Amish's first novel released on 22 June 2015. The second chapter talks about the treatment of women; how female is suppressed under the patriarchal conditions in India. The third chapter deals with the treatment of myth and how it is used to reveal the social evils. At last, the summation contains the summing up of all the three chapters which attempts to sum up the earlier chapters to estimate the greatness of Amish Tripathi.

THE ASPECTS OF ECO- CRITICISM IN AMITAV GHOSH'S
THE HUNGRY TIDE

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by

S. MANIKYALU – 2020PEN06

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Ariyakulam, Maharaja Nagar Post, Thoothukudi NH,

TIRUNELVELI-627 011, TAMIL NADU, INDIA.

CERTIFICATE

This is to certify that this project titled 'THE ASPECTS OF ECO-CRITICISM IN AMITAV GHOSH'S *THE HUNGRY TIDE'* is a bona fide work of S. MANIKYALU of Final Year MA English, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of MASTER OF ARTS IN ENGLISH during the academic year 2021 -22.

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23. 12.21

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23.12.21

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P.G. Dept. of English
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DECLARATION

I do hereby declare that this project titled **"THE ASPECTS OF ECO-CRITICISM IN AMITAV GHOSH'S *THE HUNGRY TIDE"*** is carried out by myself for the award of the degree of **MASTER OF ARTS IN ENGLISH** is my original work.

(S. MANIKYALU)

Signature of the Internal Guide

ACKNOWLEDGEMENT

ABSTRACT

Amitav Ghosh, is a well-known Indian writer of the 21st century. His themes always deal with the nature. His writings signify the impact of nature on man due to his negligence to do his duty. He also gives voice to the voiceless.

The objective of the project **The Aspects of Eco- Criticism in Amitav Ghosh's** *The Hungry Tide* is to examine the role of nature and its role as the protagonist of the novel. To analyse the psychological as well as the physical traumas of the backward class.

The first chapter **Introduction** deals about the life of the author and some of his best known works that he wrote. It also deals how the novels became popular. The author's life and the novel *The Hungry Tide* is also dealt with.

The second chapter **Devastated Ecology** speaks about the manmade destruction of nature and about nature's prominence.

The third chapter **The Psychological and the Physical Reverberations** deals with the backfire of nature. It also deals with Morichjhapi massacre of the psychological trauma which follows.

The forth chapter **SUMMATION** sums up the whole project. It deals with how both the human as well as the non- human species should learn to respect each other. And how as a human being, one should learn to preserve nature as it is. If not both the species should face the consequences.

FEMALE PERSPECTIVE IN GITHA HARIHARAN'S
THE THOUSAND FACES OF NIGHT

A project submitted to the
Department of English
in partial fulfilment of the requirements for the award of the degree of
MASTER OF ARTS IN ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by
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CERTIFICATE

This is to certify that this project work titled '**FEMALE PERSPECTIVE IN GITHA HARIHARAN'S *THE THOUSAND FACES OF NIGHT***' is a bonafide work of P. PAVITHRA of Final Year M.A. ENGLISH, Sri Sarada College for Women (Autonomous), Tirunelveli - 627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF ARTS IN ENGLISH** during the academic year 2021 - 22.

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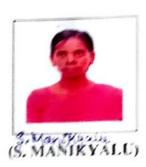**INTERNAL GUIDE**

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DECLARATION

I do hereby declare that this project work titled **"FEMALE PERSPECTIVE IN GITHA HARIHARAN'S** *THE THOUSAND FACES OF NIGHT"* is carried out by myself for the award of the degree of **MASTER OF ARTS IN ENGLISH is** my original work.

P.Pavithra.

(P. PAVITHRA)

M. Lalith 23/11/21

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ACKNOWLEDGEMENT

ABSTRACT

Githa Hariharan, a well-known Indian woman novelist, has tried to focus on the deeply ingrained biases of Indian Society against the feminine gender. Hariharan projects the urges, dreams and desire of a woman, who has an aversion to be bounded and suffocated by her surroundings. All the characters in the novels are in the process of revealing their experiences.

The project entitled *FEMALE* **PERSPECTIVE** **IN** **GITHA HARIHARAN'S** *THE THOUSAND FACES OF NIGHT* focus the condition of Indian woman in between tradition and modernity. The objective of the novel is to highlight the marital oppression and sufferings of women.

The First chapter **Introduction** deals with Githa HariHaran's early life, her writing career, her concepts, and her achievements, etc.

The Second chapter **Mythological Exploration** in deals with the Indian Mythology stories which is related to the epics of Ramayana and Mahabharata. Through these epics the characters mould themselves.

The Third chapter **Subjugation of Women Characters** probes the physical condition, gender bias in the family and their impact on women.

The fourth chapter **Summation** sums up the previous chapters.

THE SEARCH FOR FREEDOM DUE TO TYRANNY IN CHIMAMANDA NGOZI ADICHIE'S *PURPLE HIBISCUS*

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by

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CERTIFICATE

This is to certify that this project work titled 'THE SEARCH FOR FREEDOM DUE TO TYRANNY IN CHIMAMANDA NGOZI ADICHIE'S PURPLE HIBISCUS' is a bonafide work of **T. PONNARASI** of Final Year M.A. English, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF ARTS IN ENGLISH** during the academic year 2021 - 22.

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DECLARATION

I do hereby declare that this project work titled **"THE SEARCH FOR FREEDOM DUE TO TYRANNY IN CHIMAMANDA NGOZI ADICHIE'S** *PURPLE HIBISCUS"* was carried out by myself for the award of the degree of **MASTER OF ARTS IN ENGLISH** is my original work.

(T. PONNARASI)

Signature of the Internal Guide

ACKNOWLEDGEMENT

ABSTRACT

Chimamanda Ngozi Adichie is the bestselling author of three novels, and today, she is considered as a revolutionary force in Nigerian writing, mainly because she introduced a feminist perspective where it was most needed in Nigerian society. She is popularly known for bringing into attention the much-neglected women characters in Nigerian society. Her novels are women-centric. Her novel *Purple Hibiscus* is commenting a social situation and its implication in a postmodern world. Adichie presents novel *Purple Hibiscus* with a very strong feminist streak, adds some new dimensions. The novel deals with feminism and also the empowerment of women.

The objective of this project is to examine violence experienced by the family members; to investigate the changes of man's and woman's attitude; and to show their revolt against violence. Additionally, her work provides an insight into the world of violence suffered by Nigerian women in Nigerian patriarchal society.

The Project entitled **The Search for Freedom due to Tyranny in Chimamanda Ngozi Adichie's** *Purple Hibiscus* focuses on how women are oppressed, dehumanized and experienced various forms of cruelty in the hands of men.

The first chapter **Introduction** discusses the emergence of Nigerian Literature and also a biographical note of Chimamanda Ngozi Adichie and her literary achievements.

The second chapter **The Treatment of Women as Other** probes deep into the problems women face as other in the male dominated society.

The third chapter **The Quest for Identity** aims at discussing the different problems encountered by Nigerian women in the patriarchal society and also their struggle to search for identity.

The fourth chapter **Summation** sums up the previous chapters and presents the general perspective of the novel.

MYTH AND NEWFANGLEDNESS IN CHITRA BANERJEE DIVAKARUNI'S *THE FOREST OF ENCHANTMENTS*

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

HAND · HEART · HEAD

Submitted in December 2021 by

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I do hereby declare that this project titled "**MYTH AND NEWFANGLEDNESS IN CHITRA BANERJEE DIVAKARUNI'S** *THE FOREST OF ENCHANTMENTS*" is carried out by myself for the award of the degree of **MASTER OF ARTS IN ENGLISH** is my original work.

(V. PRAVEENA SANKARI)

Praveena Sankari. V.

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ACKNOWLEDGEMENT

ABSTRACT

Chitra Banerjee Divakaruni is an Indian-American author, poet, and Professor of creative Writing programme at the University of Houston. Divakaruni works are largely set in India and United states, and often focus on the experiences of South Asian immigrants. She publishes novels in multiple genres, including realistic fiction, historical fiction, magical realism, myth and fantasy.

The objectives of the project is to depict the mythical representation of women and the modernism in the presentation of the characters.

The first chapter **Introduction** deals about literature. It projects the life and works of Chitra Banerjee Divakaruni and many contemporary women writers along with Chitra Banerjee Divakaruni. It further analysis the short summary of each and every novel of Chitra Banerjee Divakaruni.

The second chapter **Delineation of Myth** aims to highlight the sufferings of the women by mythical represention. Chitra Banerjee Divakaruni in her novel *The Forest of Enchantment* reveals the story of the Ramayana's talk about the social conditioning of a women who descends her positioning in the cultural paradigm. The novel takes us back to the tome of the Indian epic *Ramayana* followed by half history, half Myth and magical. The female character Sita plays a strong role in the novel. These women face the challenges no less than the men faced in their lives.

The third chapter deals with the **Newness in Presentation of Characters** in *The Forest of Enchantments*. It is rather different from her works as it attempts to translate the voice of modern women through Sita, where Sita is a a projection of a

male standpoint. Chitra Banerjee Divakaruni portrays Siva as a powerful, strong and independent women and equal to men around her rather than subservient.

The final chapter **Summation** sums up the previous chapters and it highlights the myth and Newfangledness depicted in the novel with artistic and realistic way. It says the women's different approaches to acquire their own consciousness of life.

THE POTENTIAL OF POSITIVE THINKING IN PREETI SHENOY'S *WAKE UP LIFE IS CALLING*

A project work submitted to the

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in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

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ABSTRACT

Preeti Shenoy is a contemporary writer who influences a lot of youngsters by producing a positive vibration in their mind and conveying a message through her works. Her effort to bring harmony among relationship especially out of blood relationship seems excellent in the novel *Wake Up, Life is Calling*. The first chapter **Introduction** contains the information about the brief history of the Indian Literature and contemporary writers of twentieth century in Indian Literature. It also provides the list of works written by Preeti Shenoy and her focus on the reality of life and her tries to judge the situation with various perspectives. The second chapter **Positive thinking of Ankita** explains the rise and fall of Ankita in her life. The third chapter **The Travails of Ankita** examines the sufferings of Ankita and also focuses that how the protagonist overcomes the obstacles in her life. The fourth chapter Summation gives the overall view of the project. It contains the brief summary of the previous chapters.

MULTICULTURAL INTRICACY IN AMIT CHAUDHURI'S
AFTERNOON RAAG

A project submitted to the

Department of English

in partial fulfilment of the requirements for the award of the degree of

MASTER OF ARTS IN ENGLISH

Submitted in December 2021 by

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ABSTRACT

Amit Chaudhuri is the protagonist contemporary writer of Indian English Literature. Chaudhuri depicts the Bengali sensibility, Cultural values and experience based in his novels. This project entitled **MULTICULTURAL INTRICACY IN AMIT CHAUDHURI'S** *AFTERNOON RAAG* focuses on how migrants face cultural issues and how the narrator got trouble in his love.

The Objective of the project is the search for cultural identity and loneliness in the foreign land experienced by the immigrants in Amit Chaudhuri's *Afternoon Raag*

The first chapter **Introduction** contains the brief information of about Indian writing in English and prominent writers of Indian English Literature. It also provided the list of works written by Amit Chaudhuri.

The Second chapter **Melancholy and Nostalgia in Abroad** deals with the issues of cross-cultural dilemma faced by the migrants and prominent theme of Nostalgia.

The Third chapter **The Portray of Culture** illuminates the in-between space in which the narrator is trapped. The theme expresses the author's struggle in the host country.

The Fourth chapter **Summation** sums up the points of arguments, complex and it also gives the overall view of the dissertation. It contains the brief summary of the previous chapters. It also gives justification to the title *Afternoon Raag* of the dissertation.

A STUDY ON PURCHASE INTENTION OF CUUSTOMERS TOWARDS ORGANIC PRODUCTS IN TIRUNELVELI CITY

Dissertation submitted to

MANONMANIAM SUNDARNAR UNIVERSITY

In partial fulfillment of the requirements for the award of the degree of

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A STUDY ON ROLE OF SMALL SCALE INDUSTRIES IN THE ECONOMIC DEVELOPMENT OF TIRUNELVELI CITY WITH REFERENCE TO DIC

Dissertation submitted to

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In partial fulfillment of the requirements for the award of the degree of

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ABSTRACT

"Small scale industry" today constitutes a very important segment of the Indian Economy.it may sound small but actually it plays a crucial part in the overall growth of an economy. The development of This Sector Came about primarily by the Vision of our late Prime Minister ,Jawaharlal Nehru ,who sought to develop core industry and to have a supporting sector in the form of small scale enterprises. This paper attempts to assess the. this CITY is fully depending upon the agriculture sector is depending upon the monsoon conditions but the monsoon conditions is failing the agriculture is creating unemployment and poverty situation .This people migrated from agriculture sector to industrial sector for employment opportunities and increasing the income level. Government should encourage the industrial sector for the betterment of the people.

Key Words: Small Scale Industries, Problems, Industrial sector and poverty

A STUDY ON CHALLENGES FACED BY FIRST GENERATION GIRL STUDENT IN COLLEGE WITH REFERENCE TO TIRUNELVELI CITY

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ABSTRACT

First generation college students are students whose parents or guardians have not obtained a four year college degree. These students as a group make up a large proportion of the college student population and are often reported to have difficulties in their campus experience. Although the first generation students have received much attention in previous years no research effort has been made on this topic. The article has used a researched qualitative synthesis study framework, which investigates 133 dissertation abstracts by exploring dissertations. The category of first generation college student was introduced over 25 years ago students within this category by the following definition students can claim first generation students status if neither one of their parents or guardians possesses a four year degree. Are not new to higher education but their increasing presence at private, four year institutions requires careful attention from administration and faculty. The rising costs of higher education combined with the nation's recent economic decline have made earning a college degree and achieving the American nearly impossible for these students. This qualitative research study seeks to understand the lives of first generation college students at a small, private college in the northeast. It draws on the analyses of demographic, interview and case study data research in the fields of sociology, psychology and college access and preparation. The study results in three distinct case studies that provide insight into the individual lives for first generation students. It concludes with specific steps this institution can take to respond to the needs of this growing population on its campus. Recommendations, though specific to the case, can be applied to other institutions facing similar challenges. The purpose of this study was to examine the perceived academic obstacles of first generation students in comparison to non first generation students.

Keywords: First generation, Retention, Student success, High Impact Practices and Support Services

A STUDY ON SOCIAL NETWORK USE OF THE STUDENTS IN TIRUNELVELI CITY DURING COVID-19

Dissertation submitted to

MANONMANIAM SUNDARANAR UNIVERSITY

In partial fulfilment of the requirements for the award of the degree of

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Dissertation submitted to

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Place: Tirunelveli

Date: 08.07.2021

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ABSTRACT

Teachers are the pillars of our nation. Teachers play an important part in developing the knowledge and skills of youth. This study aims at investigating the job satisfaction among school teachers. Fifty respondents from the private school and 50 from the government school participated for the purpose of this study. Data collected was analyzed with descriptive statics using SPSS version 16. On comparing the job satisfaction level between private and government school teachers, it was found that there is no significant difference in their level of satisfaction irrespective of gender. The present study was conducted to investigate a comparative study of job satisfaction in public and private school teachers. 'Job satisfaction' refers to the attitudes and feelings people have about their work. Positive and favorable attitudes towards the job indicate job satisfaction. Negative and unfavorable attitudes towards the job indicate job dissatisfaction. Researches support that teacher's job satisfaction has been found one of the very important variable related to positive teaching behavior toward their job. There has also been considerable interest in the complex relationship between an individual's job satisfaction and satisfaction with other aspects of his or her life. It was hypothesized that a comparative study of job satisfaction in public and private school teachers. To test this hypothesis the researcher conducted this study to investigate the sense of teacher's job satisfaction. For this purpose the researcher developed a questionnaire of 25 items and 5 options. A sample of 150 public and private school teachers was conveniently selected for the study. Data analysis was conducted through t-test and 'ANOVA' which showed that there is no significance difference between teacher's job satisfaction in public and private schools.

KEY WORDS: Job satisfaction, public and private school teachers, Government School Teachers and Private school Teachers.

"A STUDY ON TECHNOLOGY ADOPTION IN MICRO, SMALL, MEDIUM ENTERPRISES IN TIRUNEVELI CITY"

Dissertation Submitted to

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ABSTRACT

In order to understand the technology that play a role, we must first understand what the state of technology adoption amongst the Indian MSMEs is todayThe main purpose of the study is to investigate factors that encourage, as well as those that remain barriers to technology adoption of MSMEs.An adoption analysis approach considers the process from the organization attributes, resulting in a plan for carrying out the adoption of technology that is rooted in an organizational context and addresses issues of concern to the intended user. This study uses existing literature as evidence to formulate this study and fit it into Empirical Research Design. The study revealed that 35% MSMEs has adopted business management software and among them more than 40% of the MSMEs already use digital banking and payment services with another 40% likely to adopt soon.The researcher adopted Stratified Random Sampling allowed to classify with different sectors for MSMEs. This study has identified the factors influencing technology adoption and challenges for technology adoption and its impact on business performance. This would help the organization to formulate the feasible plan to implement the technology adoption in MSMEs.

Keywords: Technology Adoption, Information Intensity, Perceived Relative Advantages,MSME.

"A STUDY ON PUBLIC DISTRIBUTION SYSTEM AND FOOD SECURITY IN TIRUNELVELI CITY"

Dissertation submitted to

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ABSTRACT

Availability of food grains is a necessary but not passable condition to ensure food security to the poor. In addition to food availability, it is necessary that food accessibility is also ensured to the poor households. This can be done either by raising the level of incomes of these poor households or by providing them food grains at subsidized prices. Public Distribution System (PDS) is a way to ensure accessibility of food grains to these poor households. Public Distribution System (PDS) means distribution of essential commodities to a large number of people through a network of Fair Price Shops (FPS) on a recurring basis. In India, PDS evolved as a major instrument of the Government's economic policy for ensuring availability of foodgrains to the public at affordable prices as well as for enhancing the food security for the poor. It is an important constituent of the strategy for poverty eradication and is intended to serve as a safety net for the poor. PDS is operated under the joint responsibility of the Central and the State Governments. The Central Government has taken the responsibility for procurement, storage, transportation and bulk allocation of foodgrains, etc. The responsibility for distributing the same to the consumers through the network of Fair Price Shops (FPS) rests with the State Governments. The operational responsibilities including allocation within the State, identification of families below poverty line, issue of ration cards, supervision and monitoring the functioning of FPS rest with the State Governments. The present project will try to give an overview of the PDS system as it existed in the country. It would also look into the new system of Targeted Public Distribution System (TPDS) as has been introduced recently. The project would firstly outline the present poverty situation and the agricultural sector in India and then proceed to look at the effect of the PDS on the Indian economy as a whole. An effort will also be made to estimate the future benefits or losses that PDS might have on the Indian economy as a whole.

Keywords: PDS, TPDS, FPS, RPDS

A STUDY ON PERSONAL AND SOCIAL PERCEPTION OF OCCUPATIONAL HAZARDS BY HEALTH CARE WORKERS IN TIRUNELVELI DISTRICT DURING COVUD 19

Dissertation Submitted to

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ABSTRACT

Coronavirus (CoV) infections are emerging respiratory viruses that are known to cause illness ranging from the common cold to severe acute respiratory syndrome (SARS) [CoV is a zoonotic pathogen that can be transmitted via animal-to-human and human-to-human interactions . Multiple epidemic outbreaks occurred in 2002 (SARS), with approximately 800 deaths, and in 2012 (Middle East respiratory syndrome coronavirus, MERS-CoV), with 860 deaths . About 8 years after the MERS-CoV epidemic, the current outbreak of coronavirus disease 2019 (COVID-19) in Wuhan City, Hubei Province, China, has emerged as a global outbreak and significant public health issue . On January 30, 2020, the World Health Organization (WHO) declared COVID-19 a public health emergency of international concern . Astonishingly, during the first week of March, a devastating number of new cases were reported globally, and COVID-19 emerged as a pandemic. As of March 12, 2020, more than 125,000 confirmed cases across 118 countries and over 4600 deaths had been reported .

COVID-19 is spread by human-to-human transmission through droplet, feco-oral, and direct contact and has an incubation period of 2-14 days . To date, no antiviral treatment or vaccine has been explicitly recommended for COVID-19. Therefore, applying preventive measures to control COVID-19 infection is the most critical intervention. Health care workers (HCWs) are the primary sector in contact with patients and are an important source of exposure to infected cases in health care settings; thus, HCWs are expected to be at high risk of infection. By the end of January, the WHO and Centers for Disease Control and Prevention (CDC) had published recommendations for the prevention and control of COVID-19 for HCWs . The WHO also initiated several online training sessions and materials on COVID-19 in various languages to strengthen preventive strategies, including raising awareness and training HCWs in preparedness activities . In several instances, misunderstandings among HCWs have delayed controlling efforts to provide necessary treatment , led to the rapid spread of infection in hospitals , and put patients' lives at risk.

Knowledge can influence the perceptions of HCWs due to their past experiences and beliefs . Indeed, it can delay recognition and handling of potential COVID-19 patients during the pandemic period. However, the level of knowledge and perceptions of HCWs toward COVID-19 remain unclear. In this regard, the COVID-19 pandemic offers a unique opportunity to investigate the level of

A STUDY ON SOCIAL ECONOMIC STATICS OF MICRO ENTREPRENUERSHIP OF TIRUNELVELI CITY

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ABSTRACT

Economic statistics play a significant role in enabling policy planners to draw up plans to chart the countries development process while at the same time such statistics are capable of monitoring and evaluating the targets outlined. The collection of economic statistics in Malaysia, either through surveys or censuses, dated as far back as 1950's. Economic censuses, which are conducted at regular intervals of every five years covering a wide spectrum of industries, provide data for benchmarks of basic economic statistics. The central register system in Malaysia was established in the early 1990's centralize the register which had been maintained separately in accordance with the needs of individual surveys. The dynamic updating and maintenance work undertaken on CRS based on results of economic censuses and regular surveys, information obtained access to administrative records of statutory bodies and other government agencies strengthening plans in using administrative data in survey approach as well as challenges of an updated of business register.

Key words: economic, entrepreneur, social

"A STUDY ON SWACHH BHARAT ABHIYAN AWARENESS ANDHYGIENE PRACTICES IN TIRUNELVELI CITY"

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ABSTRACT

Prime Minister Narendra Modi launched the Swachh Bharat Mission (SBM) on October 2, 2014, the birth anniversary of Mahatma Gandhi. The ambitious program aims to make the streets, road and infrastructure across the country clean by October 02, 2019, the 150th birth anniversary of the Father of Nation. It is India's biggest ever cleanliness drive. Mahatma Gandhi had rightly said "Sanitation is more important than Independence". In urban areas, people throw litter and dust on the roads, outside their homes, footpath instead of putting it in dustbins, which slowly accumulate and transforms into huge garbage. The basic objective is to create sanitation facilities for all and eliminate completely the unhealthy practice of open defecation. The WHO reports about 600 million episodes of diarrhoea and 400,000 childhood deaths a year due to contaminated water and lack of sanitation, with an estimated 80% of all diseases and one third of all deaths in developing countries induced by consumption of contaminated water. In this context, Mahatma Gandhi has said, "Sanitation is more important than Independence". But, still 600 million of the 1.2 billion people in India have no access to toilets. This study is conducted to access knowledge, awareness and hygiene practice regarding Swachh Bharat Abhiyan among the people in Tirunelveli.

KEYWORDS: Sanitation, clean India, Hygiene, Awareness, Unhealthy

"A STUDY ON UNDERSTANDING THE CHALLENGES FOR IMPROVING SANITATION AND HYGIENE OUTCOMES IN TIRUNELVELI CITY"

Dissertation submitted to

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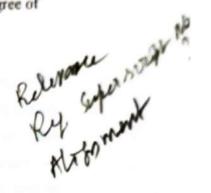
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ABSTRACT

Wash belong to any country in relation to the health of its people .It is the right of citizens to obtain safe water hygiene and wash hygiene measures are of paramount important to human life so that the purpose of intervention for health life is the transmission of bacteria .To be stopped and controlled . Viruses and poor and unsafe washes to play an important role in the transmission of various diseases since independence in India , India is struggling to prevent OFD and provide and hygiene and a variety of policies and the programs are on the way to promote washing as the nation `s self –respect mission was public intervention for sanitation and safe water storage for soap and portable water for hand washing and hand washing intervention such as safe private participation informed by the government

Key words : Health , Hygiene , Wash , Bacteria.

A STUDY ON IMPACT OF MODERN BANKING TECHNOLOGY AMONG RURAL PEOPLE IN TIRUNELVELI CITY

Dissertation submitted to

MANONMANIAM SUNDARANAR UNIVERSITY

In partial fulfilment of the requirements for the award of the degree of

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ABSTRACT

The research introduces banking technology as a confluence of several disciplines such as Finance, Information Technology, Computer Science, Communication technology and marketing science. It presents the evolution of banking the tremendous influence of information and communication technologies on banking and its products, the quintessential role played by computer science in fulfilling banks' marketing objective of servicing customers better at a less cost and thereby reap more profits. It also highlights the use of advanced statistics and computer science to measure, mitigate and manage various risks associated with banks' business with its customers and other banks. The growing influence of customer relationship management and data mining in tackling various marketing related problems and fraud detection problems in banking industry is well documented. Of particular significance is the set of latest trends this chapter presents in terms of biometric ATM's, RFID enabled bank notes, Antiphishing techniques that make interest banking secure and the applications of Web 2.0 in banking. The chapter concludes by predicting that the Banking Technology discipline is all set for rapid growth in future. Today modern banking provides various services to their customers. Information technologies are providing new innovations in the product designing. Customers are king for the banking products and customer service is being a key role at their place. Banking ombudsman is a major support to the customers and clears their issues if require. RTGS, NEFT and IMPS are providing excellent service at outline fund transfer. Online banking, Mobile banking and ATM are providing major service to the customers. This conceptual research paper is explaining various challenges and benefits of modern banking sector.

Keywords: Technology, Communication, Antiphishing, Quintessential

A STUDY ON EXPAND OF HIGHER EDUCATION SCHOLARSHIP FOR DEVELOPING COUNTRIES

Dissertation submitted to

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ABSTRACT

The higher education system of a country plays a significant role in the creation of skilled human resources. In the emerging scenario of knowledge based on society across global India is well placed with potential brains needed for the revolutionary changes. The new education policy of India considered that expenditure on education is nothing but an investment which in turn has a multiplier effect on the utilization of other resources. Education expenditure and investment in human being result in enhanced future output. When the expenditure on education is made with a view to be having more morel and human values, then education becomes consumption. The objectives of the study are to examine the socio-economic condition of the respondents in the study area, to study the treads and pattern of expenditure by the higher education institutions, to find out the financial support provided by the banking institutions education expenditure and investment in human beings result in enhanced future output. The data collected from 210 respondents selected using random sampling method of Madurai District. It concluded that the financing pattern of higher education in India is attempted here and the formulation of meaningful policies, higher education needs to be subject to disaggregate examination by these layers and types of education.

Key Words: Higher education Socio-economic background, Inequality, Exclusion, Privatization.

"A STUDY ON ENTREPRENEURIAL ASPIRATINS INHIBITIONS AND TRAITS AMONG COLLEGE STUDENTS IN TIRUNELVELI CITY"

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ABSTRACT

This study was aimed at exploring the entrepreneurial aspirations, inhibitions and traits of youth in different colleges in Tirunelveli district. Youths in colleges are most powerful and realistic to create positive change than any other generation. They are the agent of social mobility. Constructive aspiration youth has positive consequences in society. Developing entrepreneurial skills among youth is more important for the growth of an economy like India. It will create employment opportunities and increase the country's exports, which in turn will lead to improvement in the standard of living. Job aspirations is desired a young students towards correct path according their ability. The word 'Aspiration' denotes that 'a will to succeed'. It helps to move an individual from one socio-economic position to other. For occupational mobility college youths need to have correct training through proper guidance. The important skill with regard to the development of entrepreneurs is the entrepreneurial traits. This rising interest in the topic can be explained by its interdisciplinary trait, broadening the well-established nature of studies on entrepreneurship by including aspects related to organizations, human resources, leadership, and competitive strategies. The entrepreneurial traits are important factors in developing prospective entrepreneurs and creating new ventures, and the educational institutions as well as the government should lent a helping hand to the students in this regard.

Keywords: Aspirations; Ambition; inhibitions; occupation.

A STUDY ON IMPACT OF HERBAL COSMETICS AMONG YOUTH

Dissertation submitted to

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In partial fulfilment of the requirements for the award of the degree of

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ABSTRACT

Investment is the development of funds with the aim of getting return on it. It is the commitment of funds which have been saved from current consumption with the hope that some benefit will accrue in future. thus, it is a reward for waiting for money. So, the first step to investment is savings. In common usage, savings generally means putting money aside, for example, by putting money in the bank or investing in a pension plan. In a border sense, saving is typically used to refer to economizing, cutting costs, or to rescuing someone or something. In term of personal finance, saving refers to preserving money for future use - typically by putting it on deposit – this is distinct from investment where there is an element of risk. The main elements of investment are Return, Risk and Time. The research aims to study and understand the behavioural pattern of investment among the salaried people working in private sector and the difference in perception of an individual related to various investment alternatives. It also aims to provide an insight into factors considered for an appropriate investment. Gives a wider scope to understand various issues related to investment by salaried people.

KEYWORDS: Investment, Private sector, Salaried and Savings.

A STUDY ON WOMEN EMPOWERMENT THROUGH SELF HELP GROUP OF TIRUNELVELI CITY

Dissertation submitted to

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ABSTRACT

Women's empowerment is a process in which women challenge the existing norms and culture in efforts to promote their well being . This paper analyses the significance and effort of programs by Self Help Groups by comparing empowerment levels before and after three years of programme intervebtion based on survey conducted the city of Tirunelveli City of Tamil Nadu. The SHGs in Tirunelveli City operate under Mahallir Thittam , a state government programme funded by Tamil Nadu Corporation for Development of Women(TNCDW. The international Fund tor Agricultural Development (IFAD empowerment indices are used to study level of empowerment .The women in SHGs emerged as more assertive to their rights , in particular when dealing with the local community and on social matters Self Help Groups as informal association costing of members to reap economic benefits through mutual help ,solidarity and joint responsibility .The SHGs availability of micro credit to women as they lack capita and have very little or no access to credits.

A STUDY ON PROMOTE EMPOWERMENT OF WOMEN THROUGH TECHNOLOGY IN TIRUNELVELI CITY

Promotion of (handwritten)

Dissertation submitted to

MANONMANIAM SUNDARANAR UNIVERSITY

In partial fulfilment of the requirements for the award of the degree of

MASTER OF COMMERCE

Submitted by

J. YAMUNAESWARI

Register Number: 2019PCO20

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Place: Tirunelveli

Date: 08.07.2021

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I hereby declare that the dissertation entitled **"A STUDY ON PROMOTE EMPOWERMENT OF WOMEN THROUGH TECHNOLOGY IN TIRUNELVELI CITY"** submitted by me for the degree of Master of Commerce is the result of my original and independent research work carried out under the guidance of **Dr. V. SANGEETHA, M.Com., M.Phil., Ph.D., DGT.,** Assistant Professor, PG & Research Department of Commerce, Sri Sarada College for Women (Autonomous), Tirunelveli - 627011, Tamil Nadu, India, and it has not been submitted for the award of any degree, diploma, associateship, fellowship of any university/institution.

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ABSTRACT

Gender bias had been an age-old phenomenon throughout the world and girls have always taken a back seat in economic, political, and social structure in any society crosswise the globe. Though half the population of the world constitutes of women and girls their contribution in most of the areas is not significant. The biggest challenges for any government are the empowerment of women and girls to bring them and contribute to mainstream activities. In the twenty-first century, vigorous efforts are being made by all the government, organizations, and agencies to empower women and girls through education, funding, participation, and involvement in all spheres of activities for overall development.

Information and communication technological (ICT) are one of the best ways to facilities the empowerment process of women and girls to develop, involve and integrate them in an economic, political, technological, and social environment of the world. This paper discusses the challenges in the empowerment of women and girls through ICT in India and abroad and also the steps that are being taken all across the world by government, organization, business, the non-government organization to empower them through ICT.

Keywords: Education, Empowerment, activities, Technology, organization.

A STUDY ON INDEPENDENT DOMINATION OF SOME GRAPHS

A project work report submitted to the
Department of Mathematics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

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A Study on Independent domination of some graphs

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Abstract

Let $G = (V, E)$ be a simple undirected graphs. A set S of vertices in a graph G is called an independent dominating set if S is both in-dependent and dominating. A subset D of the set of vertices V of a graph G is a dominating set of G if every vertex in $V - D$ is adjacent to atleast one vertex in D. A subset S of V is called an independent set of G if no two vertices of S are adjacent in G. The number of vertices in a maximum independent set is called the independence number of G. It is denoted by α. The independent domination $i(G)$ of G is the min-imum cardinality of an independent dominating set containing the set of pairwise non - adjacent vertices of G. In this project, we analysed some wheel related graphs such as helm (H_n), closed helm (CH_n), gear graph (G_n), and web graph $W(t, n - 1)$ is the generalized web with t cycles each of the other $n - 1$ for some wheel related graphs. Also we analysed about the independent dominating set for the directed graph including the oriented version of complete graph, paths, trees , cycles and bipartite graphs. All digraphs considered are both simple and finite. The term digraphs will be used as a general term to discuss the orientaion of graphs. Independent dominating set are denoted by ID. The order of G is denoted by $n(G)$ and the neighbourhood of a vertex $v \in V$ is denoted by $N(v)$. The minimum cardinality of a maximal independent set of G is the independent domination number and is denoted by $i(G)(\alpha(G))$. The maximum cardinality of a matching of G is the matching number and is denoted by $\alpha_0(G)$. In this project we studied independent domination for some above mentioned graphs.

A STUDY ON LOCAL RING AND LOCALISATION

A project work report submitted to the
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A Study on local rings andlocalisation

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Abstract

In ring theory, local rings are certain rings that are comparatively simple in the sense of functions defined on varieties of algebraic num-bers fields examined at a particular place or prime. The local ring is a ring of meromorphic functions at a point P in an affine variety and this ring reflects the local properties of the variety at P. This ring is generalized to the concept of a ring obtained by localisation with respect to a multiplicatively closed set. The localization operation which is defined also for a module is shown to be well behaved with respect to quotients, tensor products and exact sequences.

Keywords: local ring, localisation, module, quotients, exact sequences.

A STUDY ON LATTICE ORDERED IDEAL

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

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A Study on Lattice Ordered Ideal

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ABSTRACT

In Lattice theory, a branch of Mathematics was introduced by GarettBirkhoff. R. Natarajan and J. Vimala have introduced ℓ-ideal in a commutative lattice ordered ring and established the characterization theorems and the relation between them. We have defined ℓ-ideal in a commutative ℓ-ring, quotient commutative ℓ-ring, fundamental theorem of homomorphism, first and second isomorphism theorems of a commutative ℓ-ring are proved. Further the set of ℓ-ideals of a commutative ℓ-ring R form a distributive lattice is also established. We have introduced the lattice ordered ℓ-filter and related theorems.

Keywords: commutative ℓ-ring, ℓ-ideal, homomorphism, isomorphism, ℓ-filter.

A STUDY ON PRIME LABELING OF SOME SPECIAL GRAPHS

A project work report submitted to the
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A Study on Prime Labeling of Some Special Graphs

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Abstract

Let $G(V, E)$ be the finite, simple undirected graph of order p, $V(G)$ and $E(G)$ denotes the vertex set and edge set of G respectively [3]. A bijection $f: V(G) \to \{1, 2, 3...p\}$ is called a prime labeling if for each edge $e = (u, v)$ belong to $E(G)$, $\gcd(f(u), f(v)) = 1$. A graph which admits prime label- ing is called prime graph. In this project we analyised prime labeling for some special graphs such as Flower graph (Fl_n), Splitting graph (G'), Star graph $(K_{1,n})$, Bistar graph $(B_{n,n})$, Friendship graph (T_n), SF$(n, 1)$ graph, Gear graph (G_n) and Brush graph (B_n) are prime graphs [2]. We also ana- lyised prime labeling for some Fan (F_n) related graphs and Friendship graph (T_n) and we discussed the context of some graph operations namely fusion, duplication and switching on it.

Keywords: Prime lableing, Fan graph (F_n), Friendship graph (T_n), Bistar $(B_{n,n})$, Brush graph (B_n).

INTERIOR DOMINATION RELATED CONCEPTS IN GRAPHS

A project work report submitted to

Department of Mathematics

In partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

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Interior Domination RelatedConcepts In Graphs

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Abstract

Graph theory is the study of graphs, which are mathematical structures, used to modal pair wise relations between objects from a certain collection. Graphs are among the most ubiquitous modals of both natural and human-made structures. Complementary to graph transformation systems focusing on rule-based in-memory manipulation of graphs are graph databases geared towards transaction-safe, persistent storing and querying of graph-structured data.

In chapter 1,the basic definitions and theorems on graphs which areneeded for subsequent chapters are collected.

In chapter 2,the concept of Interior dominating set and Interior domination number of a graph G are discussed.

In chapter 3,Interior domination in subdivision of some standard graphs and corona related graphs are discussed.

In chapter 4,Interior dominating set of join of two graphs and corona related graphs are discussed.

In chapter 5,Interior domination number of a Line graph are obtained.

Keywords: Graph, Interior domination, Corona graph, Star graphs, Line graph.

A STUDY ON TOTAL RESTRAINED DOMINATION NUMBER OF GRAPHS

A project work report submitted to the

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in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

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A Study on Total Restrained Domination Number of Graphs

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ABSTRACT

Let $G = (V, E)$ denotes a finite undirected simple graph with vertex set V and edge set E. A subset S of V(G) is a dominating set of G if every vertex in $V - D$ is adjacent to at least one vertex in D. The minimum cardinality of a dominating set of G is called the domination number of G and is denoted by (G). A set $D \subseteq V$ is a total restrained domination set if every vertex in $V - D$ has at least one neighbour in D and at least one neighbour in $V - D$, and every vertex in D has at least one neighbour in D. The total restrained domination number of G, denoted by $\gamma tr(G)$, isthe minimum cardinality of all total restrained dominating sets of G. The total restrained domination number in studied in detail and the number is given for some standard graphs. Some results in total restrained domination were presented. Total restrained domination number of some special graph such as bi star graph, fan graph, jewel graph, etc., are found.

Key words : Domination, Total domination, Total restrained domination, graph, neighbor.

OPEN SUPPORT RELATED CONCEPTS IN GRAPHS

A project work report submitted to the

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in partial fulfilment of the requirements for the award of the degree of

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ii

DECLARATION

I do hereby declare that this project work titled **"OPEN SUPPORT RELATED CONCEPTS IN GRAPHS"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

S. Deivanai

(S. DEIVANAI)

Signature of the Internal Guide

Open Support related concepts in graph

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Abstract

Graph theory is the study of graphs used to model pairwise rela- tions between objects from a certain collection. Graphs are among the most ubiquitous models of both natural and human-made struc- tures. In computer science, graphs are used to represent networks communications, data organisation, computational devices, the flow of computation, etc. Complementary to graph transformation sys- tems focussing on rule-based in memory manipulation of graphs are graph databases geared towards transaction-safe, persistent storing and querying of graph-structured data.

In Chapter 1, the basic definitions and theorems on graphs which are needed for subsequent chapters are collected. For graph theoretic terminology. F.Harray and Gray Chartand and Ping Zang are referred. For open support T.W.Haynes at al considered.

In Chapter 2, the concept of open support of some standard and special graph under addition are discussed.

In Chapter 3, the open support of shadow graph and open supportof (H,G) graph under addition are studied.

In Chapter 4, the concept of open support of some standard graphunder multiplication are discussed.

In Chapter 5, the open support of one point union of some graphunder addition are discussed.

Keywords: Open support, Open support of a graph, Open support underaddition of a graph, graph, data.

A COMPARATIVE DATA BETWEEN PG AND B.Ed SCHOLARS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

HAND - HEART - HEAD

Submitted in May 2022 by

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CERTIFICATE

This is to certify that the project work titled **"A COMPARATIVE DATA BETWEEN PG AND B.Ed SCHOLARS"** is a bonafide work done by N.Dhansree of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli - 627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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04/07/22

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DECLARATION

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(N. Dhansree)

Signature of the Internal Guide

A comparative data between PG and B.Ed scholars

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Abstract

The project entitled "A COMPARATIVE DATA BETWEEN PG AND B.Ed SCHOLARS" embodies the work done by N.Dhansree under the guidance of Dr. V. Lavanya.

Statistics has wide application in different path of life.Here a new intimation of students personal and professional skills are observed and tested some proper testing methods. It will helps teachers to understand their students mentality, academic skills as well as their impacts against life style and academic style. Institution comes to know their level of success and negative feedbacks from their scholars.The project consists of four chapters.
1. Introduction.
2. Area of Study.
3. Factors Influencing Scholars Life Balance.
4. Summary of Findings.
The Introductory chapter deals with the concept of academic life.

Keywords: Brain dominance, Problem solving skills, Personal and family factors, Academic factors, Academic life balance.

A STUDY ON IDENTITY GRAPH

A project work report submitted to the
Department of Mathematics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

HAND · HEART · HEAD

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i

CERTIFICATE

This is to certify that this project work titled **"A STUDY ON IDENTITY GRAPH"** is a bonafide work of M. KAMATCHI of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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DECLARATION

I do hereby declare that this project work titled **"A STUDY ON IDENTITY GRAPH"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

M. Kamatchi
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A Study on Identity Graph

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Abstract

Let I be the identity graph associated with the algebraic structure of G. Any two element $x, y \in V(G)$ in the group are adjacent or can be joined by an edge if $(x, y) = e$ such that edge $e = xy$. We discussed about the identity graphs of some spiecal commutative ring R one. Any two vertices of R adjacent $\Leftrightarrow xy = 1$. For a identity graph corresponding to the unit element set, we studied the diameter, girth, clique number of the identity graph and also we observed the $L(2, 1)$ labeling existence for identity graph An $L(2, 1)$- labeling of a graph G is a function f from the vertex set $V(G)$ to the set of all nonnegative integers such that $|f(x) - f(y)| \geq 2$ if $d(x, y) = 1$ and $|f(x) - f(y)| \geq 1$ if $d(x, y) = 2$, where $d(x, y)$ denoted the distance between x and y in G and decompose from the structure of triangle and capies of k_2.

We found the roman domination number $R(I(Z_n))$ and b-chromatic number $b(\mathbf{I}(Z_n))$ and dominator chromatic number $\chi_d(\mathbf{I}(Z_n))$ for identity graph.

Keywords: Identity graph, b-chromatic number, dominator chromatic number, roman domination .

A STUDY ON STRONG DETOUR DOMINATION
NUMBER OF GRAPHS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted in May 2022 by

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DECLARATION

I do here by declare that the project work titled **"A STUDY ON STRONG DETOUR DOMINATION NUMBER OF GRAPHS"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

G. Krishna Veni
(G.KRISHNA VENI)

K. P. Priya
Signature of the Internal Guide

iii

On Strong Detour Domination Number of Graphs

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Abstract

A detour dominating set $S \subseteq V(G)$ is called a strong detour dominating set ($sd-set$) if each vertex $u \in V - S$ is strongly detour dominated by some vertices $v \in S$ i.e $deg(v) \geq deg(u)$. The strong detour domination number of G denoted by $\gamma_{sd}(G)$ is the minimum cardinality of strong detour dominating set.

Keywords: Detour domination, Strong Domination, Path, Star, Bi-partite graph.

A STUDY ON RESTRAINED DOMINATION NUMBER OF GRAPHS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

HAND · HEART · HEAD

Submitted in May 2022 by

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ii

DECLARATION

I do hereby declare that the project work titled **"A STUDY ON RESTRAINED DOMINATION NUMBER OF GRAPHS"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

(M. MADHUMITHA)

Signature of the Internal Guide

iii

Study on Restrained Domination Number of Graphs

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Abstract

Let $G = (V,E)$ denotes a finite undirected simple graph with vertex set V and edge set E. A subset S of $V(G)$ is a dominating set of G if every vertex in V- D is adjacent to at least one vertex in D. The minimum cardinality of a dominating set of G is called the domination number of G and is denoted by $\gamma(G)$. The concept of restrained domination number was introduced by Telle. A set $S \subseteq V$ is a **Restrained dominating** set if every vertex in $V - S$ is adjacent to a vertex in S as well as another vertex in $V - S$. The restrained domination number of G denoted by $\gamma r(G)$, is the smallest cardinality of a restrained dominating set of G. The restrained domination number is studied in detail and the number is given for some standard graphs. Some results in restrained dominations were presented. Restrained domination number of some special such as fan graph, friendship graph, jewel graph, etc., are found. The characterization of Dr – complete graphs are also discussed.

Keywords: Domination, restrained domination, Dr- complete, vertex, domination number.

A STUDY ON NIL CLEAN RINGS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

HAND · HEART · HEAD

Submitted in May 2022 by

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Under the guidance of

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CERTIFICATE

This is to certify that the project work titled "A STUDY ON NIL CLEAN RINGS"

is a bonafide work of M. MAHESHWARI of Final M.Sc., Mathematics, Sri Sarada College

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the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic

year 2021-22.

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04/07/22
EXTERNAL EXAMINER
Dr.K... ...GAN
Assistant P...   ...tics
The M.D.T.H...... ...ge
Tirunelveli - 627010

ii

DECLARATION

I do here by declare that the project work titled **"A STUDY ON NIL CLEAN RINGS"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

(M. MAHESHWARI)

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A Study on Nil Clean Rings

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Abstract

Alexander J. Diesl introduced the concept of Nil clean rings . Let r be an element of a ring R. Then r is said to be a nil clean element of R, if r can be expressed as $r = e + n$, where $e \in Idem(R)$ and $n \in Nil(R)$. Then ring R is said to be a nil clean ring, if each $r \in R$ is nil clean. And Ajay Sharma introduced the concept of Nil clean ideal and Weakly clean ideal in . An Ideal I of a ring R is said to be a nil clean ideal if every element of I can be written as a sum of an idempotent and a nilpotent element of R. An Ideal I of a ring R is called weakly clean ideal if every element in I is a sum or difference of a unit and an idempotent of R. we prove some theorems on Nil clean rings, nil clean ideal and weakly clean ideal are proved.

Keywords: Ring, clean, idempotent, nil potent, nil clean ring.

A STUDY ON NANO TOPOLOGICAL SPACES

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

HAND · HEART · HEAD

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CERTIFICATE

This is to certify that the project work titled **"A STUDY ON NANO TOPOLOGICAL SPACES"** is a bonafide work of M. MARI SANGARI of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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ii

DECLARATION

I do here by declare that the project work titled **"A STUDY ON NANO TOPOLOGICAL SPACES"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

M. Mari Sangari

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iii

A Study On Nano Topological Spaces

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Abstract :

The theory of nano topology proposed by Lellis Thivagar and Richard is an extension of set theory for the study of intelligent system characterized by in sufficient and incomplete information. The elements of a Nano topological space are called the Nano open set. It originates from the Greek word Nano's which means 'dwarf' in its modern scientific sense, an order to magnititude - one billionth. The topology is named as Nano topology so because of its size, since it has atmost five elements. The author introduced the concept of nano topological space which are defined in terms of lower approximation, upper approximations and boundary region of a subset of a universe U using an equivalence relation on it and also defined nano closed sets,nano interior and nano closure. Njastad,Levine and Mashhour et al. respectively introduced the notion of α-open,semi-open and pre-open sets. Masshour has also introduced the concept of α-continuous mappings and α-open maps. And we extend some results on nano exterior point with an example and some condition.

Keywords: Nano Topology, Upper approximation, exterior point, Nano open set, Nano closure.

1

A STUDY ON K-DOMINATION GRAPHS

A project work report submitted to

Department of Mathematics

In partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

HAND - HEART - HEAD

Submitted in June-2022 by

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CERTIFICATE

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DECLARATION

I do hereby declare that the project work titled "**A STUDY ON A STUDY ON K-DOMINATION GRAPHS** ~~IN GRAPHS~~" was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

V. Muthulas

(V.MuthuLakshmi)

Signature of the Internal Guide

A Study on K-dominating Graph

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Abstract

Graph theory is one of the most flourshing branches of modern mathematics. The domination game belongs to the growing family of competitive optimization graph games. In the last decade, domination games have received an increasing amount of attention. The basic version of the game, two players, Dominator and Staller take turns to dominate vertices of a graph. Dominator aims to minimize the number of moves while Staller aims to maximize the number of moves. If both players play optimally, the number of moves is a graph invariant called the game domination number of the graph. In this project, we focus on the domination game and its variations L-domination game, Z-domination game, and connected domination game. The k-dominating set G of (i.e) $D_k(G)$ is defined to be the graph whose vertices are correspond to the dominating sets of G that have cardinality almost k. In this paper we give conditions that ensure $D_k(G)$ is connected. we studied the concept of the perfect K-domination graph and let k be the positive integer. A vertex subset D of a graph $G = (V, E)$ is a perfect k-dominating set of G if

every vertex V of G, not in D, is adjacent to exactly k vertices of D. we focus on the game k-domination graph and the game K-dominaion number of graph G is the k-domination number of the directed graph resulting from this game.

Keywords: Domination, Flourshing, adjacent, k-domination, directed graph.

A STUDY ON COLORING CONCEPTS IN GRAPHS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted in May 2022 by

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This is to certify that this project work titled "**A STUDY ON COLORING CONCEPTS IN GRAPHS**" is a bonafide work of M. MUTHUMARI of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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04/07/22

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ii

DECLARATION

I do hereby declare that this project work titled **"A STUDY ON COLORING CONCEPTS IN GRAPHS"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

M. Muthumari
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A Study on coloring concepts ingraphs

M.Muthumari[1] and V.Lavanya[2]

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Abstract

Graph theory is the study of graphs, which are mathematical struc- tures, used to model pair wise relations between objects from a cer- tain collection. Graphs are among the most ubiquitous models of both natural and human-made structures. Graphs can be used to model many types of relations and processes in physical, biological, social and information systems. Complementary to graph transformation systems focusing on rule-based in-memory manipulation of graphs aregraph databases geared towards transaction-safe, persistent storing and querying of graph-strucutred data.

In Chapter 1, the basic definitions and theorems on graphs which
are needed for subsequent chapters are collected. For Graph theoreticterminology F. Harray and Gray chartrand and Ping Zang are re-ferred. For coloring in Graphs T.W. Haynes at considered.

In Chapter 2, We study the Coloring Concepts in Various Graphs.
Also Chromatic number are discussed.

In Chapter 3, the concepts of total Coloring of central graphs of somestandard graph are discussed.

In Chapter 4, We study about the line graphs and Quasi-total graphswith some example.

In Chapter 5, Domination Number and Coloring Concepts of somegraphs are discussed.

Keywords: Graph, Coloring, Line Graphs, various graph, coloring.

A STUDY ON WEAK DETOUR DOMINATION NUMBER OF GRAPHS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

HAND · HEART · HEAD

Submitted in May 2022 by

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Under the guidance of

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This is to certify that the project work titled **"A STUDY ON WEAK DETOUR DOMINATION NUMBER OF GRAPHS"** is a bonafide work of K. K. NITHISHYA of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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DECLARATION

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K. P. Priya

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On Weak Detour Dominating Number of Graphs

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Abstract:

A detour dominating set $S \subseteq V$ is called weak detour dominating set (WdD-set) if each vertex $u \in V - S$ is weakly detour dominated by some vertices $v \in S$ (ie) $deg(v) \leq deg(u)$. The weak detour domination number denoted by $\gamma_{wd}(G)$, is minimum cardinality of weak detourdominating set. We investigate weak detour dominating number of somegraphs and study related parameters.

Keywords: Domination, Weak detour domination, Path, Star, Double star, Wheel graph.

A STUDY ON RECENT AND ADVANCES APPLICATION IN GRAPH THEORY

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

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A. PUNITHAVALLI of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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DECLARATION

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Recent and Advances Application in Graph theory

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Abstract:

The project entitle RECENT AND ADVANCES APPLICATION IN GRAPH THEORY embodies the work done by A.Punithavalli under the guidance of Dr.P.SivaAnanthi

Application is one of the most interesting areas of graph theory.Graph theory is the study of graphs,which are mathematical structures,used to modal pair wise relations between objects from a certain collection.Graphs are among the most ubiquitous modals of both natural and human-made structures.Graphs can be used to modal many types of relations and processes in physical,biological,social and information systems.Many practical problems can be represended by graphs.During the later part of the twentieth century and the begininig of twenty first century the areas of graph theory,computerengineering,and operations research has had an explosive growth.

Keywords: Graph,Mechanism of heart,Netwrok and subjects,HumanHeart,and war between Ukrainan and Russia.

A STUDY ON MAXIMUM DISTANCE IN GRAPHS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

Submitted in May 2022 by

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CERTIFICATE

This is to certify that this project work titled **"A STUDY ON MAXIMUM DISTANCE IN GRAPHS"** is a bonafide work of M. RAJESWARI of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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EXTERNAL EXAMINER

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DECLARATION

I do here by declare that the project work titled **"A STUDY ON MAXIMUM DISTANCE IN GRAPHS"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

M. Rajeswari

(M. RAJESWARI)

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iii

A Study on Maximum Distance in Graphs

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Abstract

For any two vertices u and v of a graph G, the usual distance $d(u, v)$, is the length of the shortest path between u and v. The Maximum distance M -distance is the length of the shortest path, the sum of the degrees of all vertices in the path in addition the total number of vertices in the path. We define the Maximum radius, Maximum diameter, Maximum eccentricity and Maximum selfcentered of G. In this paper we introduced the M-distance between any two vertices in a Line graph. We compute the M-distance of a Line graph of some standard graphs and also we determine the M -distance for some special graphs. In this paper we found M -distance of cartesian product of some standard graphs, like cycle graph, complete graph, path graph and star graphs. In this paper we investigate the M -distance of the corona product of cycle graphs and path graphs, complete graphs and star graphs.

Keywords: M-distance, M-eccentricity, M-radius, M-diameter and M-selfcentered.

A STUDY ON DETOUR M-DISTANCE IN GRAPHS

A project work report submitted to the
Department of Mathematics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

HAND · HEART · HEAD

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CERTIFICATE

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DECLARATION

I do hereby declare that the project work titled **"A STUDY ON DETOUR M-DISTANCE IN GRAPHS"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

(R.SANGEETHA PRIYA)

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A Study on Detour M-distance in Graph

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Abstract :

In this paper, we determined the detour D^M-distance between any two vertices in a Line graph. We computed the D^M-distance of a Line graph and also we determined the D^M-distance of some special graph such as path graph, cycle graph, gear graph, etc., are found. G is a non-trivial finite undirected connected graph without multiple edges and loops. An $x-y$ path of length $d(x,y)$ is called an $x-y$ geodesic. The diameter of a connected graph G is the length of any longest $x-y$ geodesic and is denoted by $diamG$. The detour distance between $D(u,v)$ between u and v is the length of the longest path $u-v$ path between two vertices u and v in a connected graph is called the detour M-distance $D^M(u,v)$ between u and v. A $u-v$ path of length $D^M(u,v)$ is a $u-v$ detour. The distance $D(u,v)$ between two vertices u and v in a connected graph G is the length of a longest $u-v$ path. In this paper we determined Detour M-distance graphs:

$$DM(u,v) = D(u,v) + \mathrm{P}w{\in}D(u,v)\ degW + \mathrm{P}w{\in}D(u,v)\ |w|.$$

Keywords: Detour distance, D^M-distance, D^M-eccentricity, D^M-radius, D^Mdiameter and D^M-center.

A STUDY ON INTUITIONISTIC FUZZY REGULAR WEAKLY GENERALIZED LOCALLY OPEN SET

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

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This is to certify that the project work titled "A STUDY ON INTUITIONISTIC FUZZY REGULAR WEAKLY GENERALIZED LOCALLY OPEN SET" is a bonafide work of M. SERMAESWARI of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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DECLARATION

I do here by declare that the project work titled **"A STUDY ON INTUITIONISTIC FUZZY REGULAR WEAKLY GENERALIZED LOCALLY OPEN SET"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

M. Sermaenwari

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K-R Priya

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A Study on Intuitionistic Fuzzy Regular Weakly Generalized Locally Open Set

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Abstract

A fuzzy set A in a nonempty set X is a mapping from X to the unit interval [0, 1], and A(x) is interpreted as the degree of membership of x in A. Intuitionistic fuzzy sets can be viewed as a generalization of fuzzy sets that may better model imperfect information which is in any conscious decision making. Intuitionistic fuzzy sets take into account both the degrees of membership and of non membership subject to the condition that their sum does not exceed 1. The purpose of this paper is to introduce the of intuitionistic fuzzy regular weakly generalized locally open set and study their behavior and properties in intuitionistic fuzzy topological spaces. Additionally we obtain some interesting theorems.

Key Words: Intuitionistic fuzzy topology, Intuitionistic fuzzy weakly generalized closed set, Intuitionistic fuzzy weakly generalized open set, Intuitionistic fuzzy regular weakly generalized closed set, Intuitionistic fuzzy regular weakly generalized open set, Intuitionistic fuzzy regular weakly generalized locally open set.

A STUDY ON LABELING OF CAYLEY GRAPHS AND DIGRAPHS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

HAND - HEART - HEAD

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N. Subbulakshmi @ Revathy

(N. SUBBULAKSHMI @ REVATHY)

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iii

A Study on Labeling of Cayley Graphs and Digraphs

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Abstract

A graph labeling is an assignment of integers to the vertices or edges or both subject to certain conditions. Let $t \geq 2$ be an integer. $L(t, t - 1, \ldots, 2, 1)$-labeling of a graph $G = (V, E)$ is a function f from the vertex set $V(G)$ to the set of non- negative integers such that for any two vertices $u, v \in V(G)$, $|f(u) - f(v)| \geq t - (i - 1)$ if $d(u, v) = i$, $i = 1, 2, \ldots, t$ where $d(u, v)$ denote the distance between u and v in G. The $L(t, t - 1, \ldots, 2, 1)$-labeling number of G, denoted by $\lambda_{t,t-1,\ldots,2,1}(G)$, is the smallest positive integer k such that G has an $L(t, t - 1, \ldots, 2, 1)$-labeling with k as the maximum label. A graph G is called antimagic if the n edges of G can be distinctly labeled 1 through n in such a way that when taking the sum of the edge labels incident to vertex the sums will all be different. A (p,q) graph $G = (V, E)$ is said to be vertex magic if there exist a bijection $F : V \cup E \rightarrow \{1, 2, \ldots p + q\}$ such that for all vertices of G, the sum of the label on a vertex and the labels of its incident edges is constant. Such a bijection is called vertex magic Labeling of G. A graph $G(V, E)$ is said to admit Z_3-magic labeling if there exists a function f from E onto the set $\{1, 2\}$ such that the induced map f^* on V defined by $f^*(v_i) = f(e)(mod\ 3) = k = a$, constant, where $e = (v_i v_j) \in E$. Different types of labeling were discussed and it is proved for some graphs and digraphs. Let $D = (V, A)$ be a digraph. Let Γ be a finite nontrivial group and Ω be a generating subset of Γ. The Cayley digraph is the directed graph whose vertices are the elements of Γ, and there is an arc from α to $\alpha\sigma$ whenever $\alpha \in \Gamma$ and $\sigma \in \Omega$ and it is denoted by $Cay_D(\Gamma, \Omega)$. If $\Omega = \Omega^{-1}$, then there is an arc from α to $\alpha\sigma$ if and only if there is an arc from $\alpha\sigma$ to α. Some of the labelings were proved for Cayley digraphs.

Keywords: Magic, Labeling, Z_3-magic, Distance, Cayley, Digraphs,

A STUDY ON ROMAN DOMINATION IN GRAPHS AND DIGRAPHS

A project work report submitted to the

Department of Mathematics

in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN MATHEMATICS

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Submitted in May 2022 by

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ii

A Study On Roman Domination in Graphs and Digraphs

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Abstract

Let $G = (V, E)$ be a graph. A Roman dominating function on a graph G is a function f: $V \rightarrow \{0, 1, 2\}$ satisfying the condition that every vertex u for which $f(u)=0$ is adjacent to atleast one vertex v for which $f(v)=2$. The weight of a Roman dominating function is the value $f(V) = \sum_{u \in V} f(u)$. The Roman domination number of a graph G, denoted by $\gamma_R(G)$, is the minimum weight of all possible RDFs on G. A graph G is a Roman graph(or Roman) if $\gamma_R(G) = 2\gamma(G)$. Let $D = (V, A)$ be a digraph. A Roman dominating function RDF on a digraph D is a function $f : V \rightarrow \{0, 1, 2\}$, which satisfies the condition that every vertex v for which $f(v)=0$ has an in-neighbour u, such that $f(u)=2$. The weight of an RDF f is the value $w(f) = \sum_{v \in V} f(V)$. The minimum weight of an RDF on D (denoted by γ_R *function*) is the Roman domination number of a digraph D. The existence of Roman Domination in comb Digraphs were investigated.

Keywords: Roman domination, neighbour, comb, digraphs, Roman domination number.

A STUDY ON POWER GRAPH

A project work report submitted to the
Department of Mathematics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN MATHEMATICS

HAND · HEART · HEAD

Submitted in May 2022 by

K. VISHNUPRIYA – 2020PMA24

Under the guidance of

Smt. R. Radha, M.Sc., B.Ed., M.Phil.,

Assistant Professor and Head, Department of Mathematics

SRI SARADA COLLEGE FOR WOMEN

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Ariyakulam, Maharaja Nagar Post, Thoothukudi NH,

TIRUNELIVELI - 627 011, TAMIL NADU, INDIA.

i

CERTIFICATE

This is to certify that this project work titled **"A STUDY ON POWER GRAPH"** is a bonafide work of K. VISHNUPRIYA of Final M.Sc., Mathematics, Sri Sarada College for Women (Autonomous), Tirunelveli-627 011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN MATHEMATICS** during the academic year 2021-22.

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TIRUNELVELI - 627 011   TIRUNELVELI-627 011.

EXTERNAL EXAMINER

RUGAN
Assi... ....ssor of Mathematics
The M.D. Hindu College
Tirunelveli - 627010

ii

DECLARATION

I do hereby declare that this project work titled **"A STUDY ON POWER GRAPH"** was carried out by me for the award of the degree of **MASTER OF SCIENCE IN MATHEMATICS** is my original work.

K. Vishnupriya

(K. Vishnupriya)

(signature)

Signature of the Internal Guide

iii

A Study on Power Graph

[1]K. Vishnupriya and [2]R. Radha

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Abstract

Let $\Gamma_P(G)$ be the power graph associated with a group G with vertex set $V(G)$ and edge set $E(G)$ i.e., $o(G) = |V(G)|$ and any two vertices a, $b \in G$ are adjacent if and only if $a \neq b$ and $a^m = b$ or $b^m = a$ for some positive integer m [1]. In this project we analyzed the power graph associated with some of the algebraic structures such as semi- group (S), cyclic group (Z_n), units of the ring Z_n (U_n) and Dihedral group (D_{2n}). In addition we analyzed the power graph [2], $\Gamma_P(U_n)$ which is complete when n = 1, 2, 4, p or 2p where p is a Fermat prime (F_n) which is defined as $F_n = 2^{2^n} + 1$ (prime Fermat number)$\forall$ n $\in$ Z and n $\geq$ 0.

We found the Roman and Italian domination number of power graph associated with a cyclic group Z_n which are denoted by $\gamma_R(Z_n)$ and $\gamma_I(Z_n)$ respectively. A Roman dominating function (RDF) on a graph $G = (V, E)$ is defined as a function $f : V \rightarrow \{0, 1, 2\}$ satisfying the condition that every vertex v for which $f(v) = 0$ is adjacent to at least one vertex u for which $f(u) = 2$ and the Roman domination number $(\gamma_R(G))$, is the minimum weight of a **RDF**(the value $f(V) = \sum_{v \in V} f(v)$) of all possible RDFs on G. An Italian dominating function (IDF) on $G = (V, E)$ is a function $f : V \rightarrow \{0, 1, 2\}$ if every vertex v with $f(v) = 0$ holds $\sum_{u \in N(v)} f(u) \geq 2$ and the minimum weight(the value $w(f) = \sum_{v \in V} f(v)$) of IDFs on G is called the Italian domination number $(\gamma_I(G))$. Also we found the b-chromatic number $(b(\Gamma_P(Z_n)))$ of $\Gamma_P(Z_n)$ where b-chromatic number($b(G)$) of a graph G is the largest k such that G has a b-coloring using k-colors where b-coloring is defined as a proper coloring with the additional property that each color class contains a color-dominating vertex.

Keywords: Power graph, Roman domination, Italian domination, b-coloring, color-dominating vertex.

GREEN APPROACH TO SYNTHESIS, CHARACTERIZATION AND PHYTOCHEMICAL SCREENING OF SILVER SNANOPARTICLES USING CROTON BONPLANDIANUM BAILL ROOT EXTRACT AND THEIR APPLICATIONS

A project work report submitted to the
Department of Physics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN PHYSICS

Submitted in December 2021 by
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CERTIFICATE

This is to certify that this project work titled 'GREEN APPROACH TO SYNTHESIS, CHARACTERIZATION AND PHYTOCHEMICAL SCREENING OF SILVER NANOPARTICLE USING CRONTON BONPLANDIANUM BAILL ROOT EXTRACT AND THEIR APPLICATION' is a bonafide work of M. BHAVADHARANI of Final M.Sc., Physics, Sri Sarada College for Women (Autonomous), Tirunelveli-627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN PHYSICS** during the academic year 2021 - 22.

S. Magara Jothilakshmi
21/12/2021

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INTERNAL GUIDE
Dr. S. BAGAVATHI

EXTERNAL GUIDE

2

DECLARATION

I do hereby that this project work titled " **GREEN APPROACH TO SYNTHESIS, CHARACTERIZATION, PHYTOCHEMICAL SCREENING OF SILVER NANOPARTICLES USING CRONTON BONPLANDIANUM BAILL ROOT EXTRACT AND THEIR APPLICATION**" was carried out for the award of the degree of **MASTER OF SCIENCE IN PHYSICS** is my original work.

(M. BHAVADHARANI)

Signature of the Internal Guide

(Dr. S. BAGAVOGUL)

3

ABSTRACT

Biologically dependable processes for the synthesis of Silver nanoparticles were developed in nanoscience and nanotechnology. In our research finding, green synthesis of Silver nanoparticles was performed from aqueous Silver nitrate using the Croton Bonplandianum baill root extract. The formation of Silver nanoparticles was observed by the change of colour from colourless to dark brown by the addition of Silver nitrate into root extract. The active phyto-chemicals present in the extract reduced silver ions to Silver nanoparticles. The green synthesized Silver nanoparticles were characterized by XRD analysis. From XRD analysis, the particle size, dislocation density, morphology index and micro strain of Silver nanoparticles were identified .The average particle size found to be 10.46 nm. The present investigation deals with the synthesis of Silver nanoparticles by green synthesis that has advantages over conventional methods involving chemical agents associated with environmental toxicity. Biological synthesis involves the use of Croton Bonplandianum Baill root extract in the universal solvent namely water. The reaction process was simple and convenient to handle.

This project report comprises of six chapters. The chapter I describes Introduction. The chapter II describes Review of literature. The chapter III describes Method the Materials. The chapter IV describes Characterization Techniques. The chapter V describes result and discussion. The chapter VI describes Summary and Conclusion.

SYNTHESIS AND CHARACTERISATION OF NONLINEAR OPTICAL GLYCINE ZINC CHLORIDE SINGLE CRYSTAL

A project work report submitted to the
Department of Physics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN PHYSICS

Submitted in December 2021 by

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CERTIFICATE

This is to certify that this project work titled 'SYNTHESIS AND CHARACTERISATION OF NONLINEAR OPTICAL GLYCINE ZINC CHLORIDE SINGLE CRYSTAL' is a bonafide work of A.DRISYA of Final M.Sc., Physics, Sri Sarada College for Women (Autonomous), Tirunelveli-627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN PHYSICS** during the academic year 2021 - 22.

S. Magara Jothi Lakshan
22/12/2021.

N. Boomadeis

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DECLARATION

I do hereby declare that this project work titled **"SYNTHESIS AND CHARACTERISATION OF NONLINEAR OPTICAL GLYCINE ZINC CHLORIDE SINGLE CRYSTAL"** was carried out for the award of the degree of **MASTER OF SCIENCE IN PHYSICS** is my original work.

A. Drisya.

(A.DRISYA)

N. Boomadeir.

Signature of the Internal Guide

ABSTRACT

Non-linear optical materials find wide range of applications in the fields of opto-electronics, fiber optic communication, computer memory devices etc. nonlinear optical materials interacts with light to produce a nonlinear response. Glycine is the simplest of all amino acids in the crystalline form, having three different polymorphs in which the molecules exist in the dipolar form.this dipolar nature exhibits peculiar physical and chemical properties of amino acids making them ideal candidates for use in NLO. While the structures of most amino acids are well-defined, the structures of the derivatives of protein amino acids with inorganic compounds are not. This paper defines the crystal structure of Glycine.Non-linear optical single crystal of glycine doped zinc chloride, a semi organic non linear optical material has been grown from solution (pH = 6) by slow evaporation at room temperature. The colour of the crystal is white. The crystalline nature and its various planes of reflections were observed by the powder XRD. Powder X-ray diffraction analyses have been carried out and the diffraction patterns have been indexed. Single crystal X-ray diffraction analysis reveals that the crystal belongs to hexagonal system with the space group $P3_1$.The particle size of the single crystal is approximately 60.06 nm. The lattice parameters of the grown GZC crystal were obtained as a = b = 7.024, c = 5.472, $\alpha = \beta = \gamma$. Particles of size 60.06 nm were obtained.

EXPLORING THE UNEXPLOITED PLANT RESOURCES FOR THE SYNTHESIS OF SILVER NANOPARTICLE

A project work report submitted to the
Department of Physics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN PHYSICS

Submitted in December 2021 by

S.GURU PRIYA – 2020PPH03

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This is to certify that this project work titled 'EXPLORING THE

UNEXPLOITED PLANT RESOURCES FOR THE SYNTHESIS OF SILVER

NANOPARTICLE' is a bonafide work of S.GURU PRIYA of Final M.Sc., Physics,

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fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE**

IN PHYSICS during the academic year 2021 - 22.

S. Magara Jothilakshmi
21/12/2021

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EXTERNAL EXAMINER

DECLARATION

I do hereby declare that this project work titled "**EXPLORING THE UNEXPLOITED PLANT RESOURCES FOR THE SYNTHESIS OF SILVER NANOPARTICLE**" was carried out for the award of the degree of **MASTER OF SCIENCE IN PHYSICS** is my original work.

S. Guru priya

(S.GURU PRIYA)

S. Magara Jothilakshmi
21/12/2021.

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ABSTRACT

Development of biologically inspired experimental processes for the synthesis of nanoparticles is evolving into an important branch of nanotechnology. The bio reduction behaviour of various plant leaf are being extracted for the synthesis of silver nanoparticles was investigated employing, XRD (X-ray diffraction), EDX (Energy Dispersive X-ray) and SEM (Scanning Electron Microscopy) the polyol components and the water-soluble heterocyclic components are mainly responsible for the reduction of silver ions and the stabilization of the nanoparticles. Polysaccharides as factors involved in biosynthesis and stabilization of the nanoparticles.

Of all plants studied by the method of spectrophotometric analysis, the reaction mixture of each plant exhibited a strong absorption between 400 and 500 nm, sunflower was found to exhibit very strong absorption. Also it was observed that there is no correlation between the colour development and the increase in absorbance exhibited by the nanometal synthesized. Thus the sunflower leaf extract was found to be promising in the development of silver nanoparticles. In the present work, silver nanoparticles were synthesized using biosynthesis method. The samples were identified by powder X-Ray Diffraction spectroscopy, Scanning Electron Microscope (SEM). From the powder X- Ray Diffraction result, the face centered cubic crystal structure of Silver was confirmed and the estimated crystallite size is 23 nm using Debye's Scherer formula. The surface morphology of the silver nanoparticles are examined by SEM analysis which shows the high density silver nanoparticles with spherical shape. The EDX spectrum confirmed the formation of metallic silver by showing the highest intense peak at 3 keV.

Keywords:

Nano particles, Bioredution, Nanometals, Polysaccharides X-ray diffraction, Green synthesis.

INVESTIGATION ON THE STRUCTURAL, OPTICAL AND FUNCTIONAL ANALYSIS OF MANGANESE DIOXIDE VIA CO-PRECIPITATION TECHNIQUE

A project work report submitted to the
Department of Physics
in partial fulfilment of the requirements for the award of the degree of
MASTER OF SCIENCE IN PHYSICS

Submitted in December 2021 by

S.R.VINISHA – 2020PPH04

Under the Guidance of

K.NIRANJANA DEVI M.Sc., M.Phil.,

Assistant Professor, Department of Physics

SRI SARADA COLLEGE FOR WOMEN

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(A Branch of Sri Ramakrishna Tapovanam, Tirupparaithurai)

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TIRUNELVELI- 627 011, TAMIL NADU, INDIA.

CERTIFICATE

This is to certify that this project work titled **'INVESTIGATION ON THE STRUCTURAL, OPTICAL AND FUNCTIONAL ANALYSIS OF MANGANESE DIOXIDE VIA CO-PRECIPITATION TECHNIQUE'** is a bonafide work of S.R.VINISHA of Final M.Sc., Physics, Sri Sarada College for Women (Autonomous), Tirunelveli-627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN PHYSICS** during the academic year 2021 - 22.

S. Magala Jothi Lakshmi
21/12/2021

K. Nimybt
21/12/2021

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EXTERNAL EXAMINER

DECLARATION

I do hereby declare that this project work titled "INVESTIGATION

ON THE STRUCTURAL, OPTICAL AND FUNCTIONAL ANALYSIS

OF MANGANESE DIOXIDE VIA CO-PRECIPITATION

TECHNIQUE" was carried out for the award of the degree of MASTER OF

SCIENCE IN PHYSICS is my original work.

ℒS. R. Vinisha
(S.R.VINISHA)

K. Niranjan 21/12/2021
Signature of the Internal Guide

INVESTIGATION ON THE STRUCTURAL, OPTICAL AND FUNCTIONAL ANALYSIS OF MANGANESE DIOXIDE VIA CO-PRECIPITATION TECHNIQUE

ABSTRACT

Due to fast consumption of fossil fuels and energy scarcity in recent times, designing and developing high-performance energy conversion and storage devices has been the prime goal of the research community to fulfill the energy requirements. The super capacitors are promising components of energy storage devices and have attracted extensive attention due to their rapid charge and discharge rates, high power density, low cost, less toxicity, abundant availability and their environmental friendly nature. It has wide applications in electronic devices, aerospace vehicles, electrical vehicles, storage devices and digital communication systems.

Among MnO_2 is one of the most prominent materials exhibiting superior electrochemical property tends to serve in various applications. From the literature survey, MnO_2 is synthesized using several techniques such as Sol-Gel, Hydrothermal, *in situ* method, facile chemical method, Green synthesis method etc. In the present work, manganese oxide nanoparticles were synthesized using co-precipitation technique. The samples were identified by powder X-Ray Diffraction spectroscopy, UV-Vis diffuse reflectance spectroscopy and Fourier Transform Infrared Spectroscopy. From the powder X- Ray Diffraction and Raman spectroscopy results, the body centered tetragonal crystal structure of Birnessite-MnO2 was confirmed and the estimated crystallite size is 48 nm using Debye's Scherer formula. From the UV-visible reflectance spectrum, a low band width of 1.58eV was determined utilizing Tauc's plot. From the FTIR spectrum, different functional groups are found.

Keywords: MnO2, Co-Precipitation, XRD, UV-Vis, FTIR.

FIRE DETECTION FROM REAL TIME VIDEO USING DEEP LEARNING

Submitted by

P.SHUNMUGA VADIVOO

Reg No: 2019PCS12

A Project Report Submitted to

SRI SARADA COLLEGE FOR WOMEN
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(Affiliated to Manonmaniam Sundaranar University, Tirunelveli – 627 012)

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In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE

2019-2021

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APRIL 20-21

CERTIFICATE

This is to certify that the project entitled "**FIRE DETECTION FROM REAL TIME VIDEO USING DEEP LEARNING** " is a bonafide work done by Selvi P.SHUNMUGA VADIVOO, Reg.No:2019PCS12 of **SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011,** in partial fulfillment of the requirements for the award of the degree of **MASTER OF COMPUTER SCIENCE** during the year 2020-2021.

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Dr. V. VALLINAYAGI
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INTERNAL GUIDE

M·Malavizhi
PRINCIPAL 20/4/2021
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Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011 on _9.7.2021_

Place: Tirunelveli-627 011

Date: 9.7.2021

1. R-
2.   9/7/2021

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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"FIRE DETECTION FROM REAL TIME VIDEO USING DEEP LEARNING"** is my original work carried out under the guidance of **(Smt).B.PARVATHI DEVI, MCA., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627 011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

P. Shunmuga Vadivoo

STATION : TIRUNELVELI

DATE: 22.04.2021

CANDIDATE

(P .SHUNMUGA VADIVOO)

1.SYNPOSIS

Detecting fire from visual scenes is a demanding task, due to the high variance of the colour and texture. A number of fire image classification approaches have been proposed to overcome this problem however, most of them rely on either rule based methods or on handcrafted features. Propose a novel deep learning Resnet50 algorithm to achieve high-accuracy fire image detection. Instead of using traditional rectified linear units or tangent functions, use adaptive piece wise linear units in the hidden layers of the network. Also create a new small dataset of fire images to train and evaluate our model. To solve the over fitting problem caused by training the network on a limited dataset, which improve the number of available training images using traditional data augmentation techniques and generative Adversarial networks. This paper presents a comparative analysis of state-of-the art image processing-based fire colour detection rules and methods in the context of geometrical characteristics measurement of wild land fires. Two new rules and two new detection methods using an intelligent combination of the rules are presented, and their performances are compared with their counterparts.

The benchmark is performed on approximately two hundred million fire pixels and seven hundred million non-fire pixels extracted from five hundred wild land images under diverse imaging conditions. The fire pixels are categorized according to fire color and existence of Fire; meanwhile, non-fire pixels are categorized according to the average intensity of the corresponding image. This characterization allows to analysis the performance of each rule by category. It is shown that the performances of the existing rules and methods from the literature are category dependent, and none of them is able to perform equally well on all categories. Means while, a new proposed method based on machine learning techniques and using all the rules as features outperforms existing state-of-the-art techniques in the literature by performing almost equally well on different categories. Thus, this method, promises very interesting developments for the future of Metrologic tools for fire detection in unstructured environments.

1

Research on video analysis for fire detection has become a hot topic in computer vision. However, the Resnet50 algorithms use exclusively rule-based models and features vector to classify whether a frame is fire or not. These features are difficult to define and depend largely on the kind of fire observed. The outcome leads to low detection rate and high false-alarm rate. A different approach for this problem is to use a learning algorithms to extract the useful features instead of using an expert to build them.

Research on video analysis for fire detection has become a hot topic in computer vision. However, the Resnet50 algorithms use exclusively rule-based models and features vector to classify whether a frame is fire or not. These features are difficult to define and depend largely on the kind of fire observed. The outcome leads to low detection rate and high false-alarm rate. A different approach for this problem is to use a learning algorithm to extract the useful features instead of using an expert to build them.

SARCASAM WITH POLARITY USING MACHINE LEARNING

Submitted by

M. KANAGA LAKSHMI

Reg No: 2019PCS04

A Project Report Submitted to

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In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE

2019-2021

HAND · HEART · HEAD

Guided by

(Smt.) P. ANITHA M.Sc., M.Phil.,

DEPARTMENT OF COMPUTER SCIENCE,

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APRIL 2021

CERTIFICATE

This is to certify that the project entitled **"SARCASAM WITH POLARITY USING MACHINE LEARNING"** is a bonafide work done by **Selvi M. KANAGA LAKSHMI, Reg.No:2019PCS04** of **SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011**, in partial fulfillment of the requirements for the award of the degree of **MASTER OF COMPUTER SCIENCE** during the year 2020-2021.

V. Vallinayagi

HEAD OF THE DEPARTMENT

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INTERNAL GUIDE

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TIRUNELVELI - 627 011

Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI on

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Place: Tirunelveli

Date: 09.07.2021

(External Examiners)

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2.   9/7/2021.

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Tamilnadu, India.

DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE "on "SARCASAM WITH POLARITY USING MACHINE LEARNING"** is my original work carried out under the guidance of **Smt. P. ANITHA, M.Sc., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilandu, India. The data and reports are true and correct to the best of my knowledge.

Station : Tirunelveli

Date   : 22.04.2021

M. Kanagalmi

CANDIDATE

(KANAGA LAKSHMI. M)

1. SYNOPSIS

In today's information-saturated world, it's a challenge for businesses to keep on top of all the tweets, emails, product feedback and support tickets that pour in every day at every place. The need for automatic extraction of document information has become prominent in information organization and knowledge discovery. Thus, here we used text analysis, Text analysis is the automated process of understanding unstructured text data and making it easier to manage. It is a classic example of machine learning. Text analysis is one such solution, where in the natural language text is assigned to one or more predefined categories based on the content. This work focuses on sentimental analysis and emotion detection also known as opinion mining. It is a way of automatically extracting and analysing the emotions and opinions, and not facts, of messages and posts. A classification architecture is proposed, which consists of major modules such as data cleaning and pre-processing, feature selection, and classifier training that includes a classified prediction model. In this study, logistic Regression and naive bayes classifier is used in these experiments, which evaluate the performance of the proposed classified architecture by analysing the sentimental, emotions and opinions of public twitter data using and public survey data. Logistic regression and naive bayes classifier, significantly improve prediction accuracy over the other classification algorithm. This proposed classification architecture, with the various feature selection techniques described and used, are significant, and are readily applicable to many other areas of sentimental analysis such as Fine-grained Sentimental Analysis, Aspect-based Sentimental Analysis, Emotion detection, Intent analysis, Multilingual sentimental analysis.

Sarcasm is a sophisticated form of irony widely used in social networks and micro-blogging websites. It is sometimes wont to convey implicit data inside the message an individual transmits. Sarcasm can be used for various functions like criticism or mockery. However, it's onerous even for humans to acknowledge. Therefore, recognizing sardonic statements is terribly helpful to enhance automatic sentimental analysis of information collected from micro blogging websites or social networks. Sentimental analysis refers to the Identification and aggregation of attitudes and opinions expressed by Internet users towards a Specific topic. In this project, we tend to propose a pattern-based approach to observe humor on Twitter.

We propose four sets of options that cowl the various forms of humor we tend to defined. We use those to classify tweets as sardonic and non-sarcastic. Our projected approach reaches associate accuracy of eighty-three .1% with a precision equal to 91.1%. We conjointly study the importance of every of the projected sets of options and measure its side price to the classification. In particular we tend to emphasize the importance of pattern-based options for the detection of sardonic statements.

In the implemented system, tweets are collected and sentimental analysis is performed on them. Based on the results of sentimental analysis few suggestions can be provided to the user.

SEMANTIC- BASED COMPOUND KEYWORD SEARCH OVER ENCRYPTED CLOUD DATA

Submitted by

S. SEETHALAKSHMI
Reg No: 2019PCS11

A Project Report Submitted to
SRI SARADA COLLEGE FOR WOMEN
(AUTONOMOUS)
(Affiliated to ManonmaniamSundaranar University, Tirunelveli - 627012)
Institution recognized u/s 2(f) and 12(B) of UGC
Reaccredited with "A" grade by NAAC
(A branch of Sri Ramakrishna Tapovanam, Tirupparaithurai)

In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

Guided by
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APRIL -2021

CERTIFICATE

This is to certify that the project entitled "SEMANTIC- BASED COMPOUND KEYWORD SEARCH OVER ENCRYPTED CLOUD DATA" is a bonafide work done by Selvi S.SEETHALAKSHMI, Reg.No:2019PCS11 of SRI SARADA COLLEGE FOR WOMEN (AUTONOMOUS), TIRUNELVELI-627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

HEAD OF THE DEPARTMENT

HEAD, DEPARTMENT OF COMPUTER SCIENCE
SRI SARADA COLLEGE FOR WOMEN,
(AUTONOMOUS)
TIRUNELVELI - 627 011.

INTERNAL GUIDE

PRINCIPAL

PRINCIPAL
SRI SARADA COLLEGE FOR WOMEN
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TIRUNELVELI - 627 011

Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN (AUTONOMOUS), TIRUNELVELI on _____

Place: Tirunelveli-627 011

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DECLARATION

I hereby declare that the project work done for the award of the degree of "SEMANTIC-BASED
COMPOUND KEYBOARD SEARCH OVER ENCRYPTED CLOUD DATA" is my original
work carried out under the guidance of **Dr (Smt.). V.VALLINAYAGI, M.Sc., M.Phil., Ph.D.,** Sri
Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and
reports are true and correct to the best of my knowledge.

HEAD OF THE DEPARTMENT
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PRINCIPAL 21/4/2021
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STATION: TIRUNELVELI

DATE: 22-04-2021

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(SEETHA LAKSHMI S)

1. SYNOPSIS

With the recent explosive growth of the amount of content on the Internet, it has become increasingly difficult for users to find and utilize information and for content providers to classify and catalog documents. Traditional web search engines often return hundreds or thousands of results for a search, which is time consuming for users to browse. On-line libraries, search engines, and other large document repositories *(e.g.* customer support databases, product specification databases, press release archives, news story archives, *etc.)* are growing so rapidly that it is difficult and costly to categorize every document manually. In order to deal with these problems, a look towards automated methods of working with web documents so that they can be more easily browsed, organized, and cataloged with minimal human intervention. In contrast to the highly structured tabular data upon which most machine learning methods are expected to operate, web and text documents are semi-structured. Web documents have well-defined structures such as letters, words, sentences, paragraphs, sections, punctuation marks, HTML tags, and so forth. It is estimated that as much as 85% of all digital business information, most of it web-related, is stored in non-structured formats *(i e .* non-tabular formats, such as those that are used in databases and spreadsheets *)*.

Developing improved methods of performing machine learning techniques on this vast amount of non-tabular, semi-structured web data is therefore highly desirable. Clustering and classification have been useful and active areas of machine learning research that promise to help us cope with the problem of *Graph-Theoretic Techniques for Web Content Mining* information overload on the Internet. With clustering the goal is to separate a given group of data items (the data set) into groups called clusters such that items in the same cluster are similar to each other and dissimilar to the items in other clusters. In clustering methods no labeled examples are provided in advance for training (this is called unsupervised learning). Under classification we attempt to assign a data item to a predefined category based on a model that is created from pre-classified training data (supervised learning). In more general terms, both clustering and classification come under the area of knowledge discovery in databases or data mining. Applying data mining techniques to web page content is referred to as web content mining which is a new sub-area of web mining, partially built upon the established field of information retrieval. When representing text and web document content for clustering and classification, a vector-space model is typically used. In this model, each possible term that can appear in a document becomes a feature dimension. The value assigned to each dimension of a document may indicate the number of times the corresponding term appears on it or it may be a weight that takes into account other frequency information, such as the number of documents upon which the terms appear. This model is simple and allows the use of traditional machine learning methods that deal with numerical feature vectors in a Euclidean feature space. However, it discards information such as the order in which the terms appear, where in the document the terms appear, how close the terms are to each other, and so forth.

PERFORMANCE OF A WEB APPLICATION TO PREDICT DIABETES DISEASE AN APPROACH USING MACHINE LEARNING ALGORITHM

Submitted by

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In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

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APRIL -2021

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This is to certify that the project entitled "PERFORMANCE OF A WEB APPLICATION TO PREDICT DIABETES DISEASE AN APPROACH USING MACHINE LEARNING" is a bonafide work done by Selvi S.NAMBI RAJATHI, Reg.No:2019PCS05of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

HEAD OF THE DEPARTMENT   S. Ramalakshmi
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Place: Tirunelveli-627011

Date: 9 - 07 - 2021

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DECLARATION

I hereby declare that the project work done for the award of the degree of "MASTER OF COMPUTER SCIENCE" on "PERFORMANCE OF A WEB APPLICATION TO PREDICT DIABETES DISEASE AN APPROACH USING MACHINE LEARNING " is my original work carried out under the guidance of (Selvi). S.RAMALAKSHMI, M.Sc., M.Phil., Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

S. Nambi Rajathi

STATION: TIRUNELVELI   **CANDIDATE**

DATE: 22 - 04 - 2021   **(NAMBI RAJATHI. S)**

1. SYNPOSIS

Diabetes is a chronic disease with the potential to cause a worldwide health care crisis. According to International Diabetes Federation 382 million people are living with diabetes across the whole world. By 2035, this will be doubled as 592 million. Diabetes mellitus or simply diabetes is a disease caused due to the increase level of blood glucose. Accurate detection of diabetes diseases in all cases and consultation of a patient for 24 hours by a doctor is not available since it requires more sapience, time and expertise. In this study, a tentative design of a cloud-based diabetes disease prediction system had been proposed to detect impending diabetes disease using Machine learning techniques. For the accurate detection of the diabetes disease, an efficient machine learning technique should be used which had been derived from a distinctive analysis among several machine learning algorithms. Machine Learning is used across many spheres around the world. The healthcare industry is no exception. Machine Learning can play an essential role in predicting presence/absence of Locomotor disorders, Diabetes diseases and more. Such information, if predicted well in advance, can provide important insights to doctors who can then adapt their diagnosis and treatment per patient basis. Algorithms like Random Forest, Logistic regression, Decision Tree, Naïve Bayes, SVM etc.

Diabetes is caused due to the excessive of sugar condensed into the blood .Currently, it is considered as one of the lethal disease in the world. People all around the globe are affected by this serve disease knowingly or unknowingly. Other disease like heart attack, paralyzed , kidney disease, blindness and analyzing diabetes. Usual identifying process for diabetic patients needs more time and money. But with the rise of machine learning, we have that ability to develop an architecture which has the capability to predict where the patient has diabetes or not. Our main aim of this exploration is to build web application based on the higher prediction accuracy of some powerful machine learning algorithm. We have used a benchmark dataset namely Pima Indian which is capable of predicting the onset of diabetes based on diagnostics manner. With an accuracy of 82.35% prediction rate Artificial Neural Network (ANN) shows a significant improvement of accuracy which drives us to develop an Interactive Web Application for Diabetes Prediction.

Several studies have shown the effectiveness of mobile technologies in glycemic control and improvement of diabetic's management. These tools require patient and physician's commitment to ensure its success. However, mobile health applications (Apps) for diabetes management are not used in Morocco. In this study, we aim to evaluate the feasibility and acceptance of an App for intervention and clinical decision making for type 2 diabetics. Tow cross sectional studies were conducted among physicians and diabetics patients, recruited from health care centers in the region of fez. 272 type 2 diabetics participated in the patient survey. 82% patients think that a mobile App can help them manage diabetes. 103 general physicians responded to the physician questionnaire. The majority (83.5%) practiced in urban area. Only three physicians, use an electronic medical record for following up their patients. 72.8% of physicians owned a smartphone and had access to internet, 16.5% of them often downloaded health App. 89.3% believed that an App could contribute to the reorganization of diabetes management and most of them said that they would certainly use a diabetes app to manage patients once is implemented. Furthermore, physicians could spend a part of their time, sharing information with their diabetic patients via this App. Based on the results of this study, the establishment and use of a mobile application is acceptable by both patients and general practitioners of the primary health care network for following-up and management of their diabetic patients.

PREDICTION OF MULTI LUNG DISEASES BY X-RAY USING DEEP LEARNING

Submitted by

V. SANKARA PRIYA
Reg No: 2019PCS09

A Project Report Submitted to
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Reaccredited with "A" grade by NAAC
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In partial fulfilment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

HAND · HEART · HEAD

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APRIL 2021

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This is to certify that the project entitled "PREDICTION OF MULTI LUNG DISEASES BY X-RAY USING DEEP LEARNING" is a bonafide work done by Selvi. V.SANKARA PRIYA, Reg.No:2019PCS09 of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627011, in partial fulfilment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

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Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI on
09.07.2021

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Date: 09.07.2021

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Dr. Mrs. R. Shenbagavalli, B.E(Cse) M.C.A.,M.Phil., Ph.D.,
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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** entitled **"PREDICTION OF MULTI LUNG DISEASES BY X-RAY USING DEEP LEARNING"** is my original work carried out under the guidance of **Selvi. P. SANKARA PARVATHY M.Sc., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date: 22-04-2021

V. Sankara Priya.

CANDIDATE

(V. SANKARA PRIYA)

1. SYNOPSIS

In this project, we address the problem of medical data scarcity by considering the task of etection of pulmonary diseases from chest X-Ray images using small volume datasets with less han thousand samples. We implemented three deep convolutional neural networks (VGG16, ResNet-50, and InceptionV3) pre-trained on the ImageNet dataset and assessed them in lung isease classification tasks using transfer learning approach. We created a pipeline that egmented chest X-Ray (CXR) images prior to classifying them and we compared the erformance of our framework with the existing ones. We demonstrated that pre-trained models nd simple classifiers such as shallow neural networks can compete with the complex systems. We also validated our framework on the publicly available Shenzhen and Montgomery lung atasets and compared its performance to the currently available solutions. Our method was able o reach the same level of accuracy as the best performing models trained on the Montgomery ataset. However, the advantage of our approach is in smaller number of trainable parameters. Furthermore, our InceptionV3 based model almost tied with the best performing solution on the Shenzhen dataset despite being computationally less expensive. Chest X-Rays of COVID-19 and Pneumonia Tuberculosis and Bronchitis Chronic patients have proved to be an important lternative indicator in Disease's screening. But again, accuracy depends upon radiological xpertise. A diagnosis recommender system that can assist the doctor to examine the lung images of the patients will reduce the diagnostic burden of the doctor. Deep Learning techniques pecifically Convolution Neural Networks (CNN) have proven successful in medical imaging lassification. Four different deep CNN architectures were investigated on images of chest X-Rays for diagnosis of disease. These models have been pre-trained on the Keras and tensor flow Image Net database thereby reducing the need for large training sets as they have pre-trained weights. It was observed that CNN based architectures have the potential for diagnosis of disease.

A GRAPH BASED CLUSTERING APPROACH FOR RELATION EXTRACTION FROM CRIME DATA

Submitted by

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Reg No: 2019PCS13

A Project Report Submitted to

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APRIL 2021

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INTERNAL GUIDE

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Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI on   9.7.2021

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Date: 9.7.2021

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DECLARATION

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Station : Tirunelveli

Date   : 22-04-2021

S. Soma Sankari @Sowmya

CANDIDATE

(SOMA SANKARI @ SOWMYA. S)

1. SYNOPSIS

Today's era is seeking a great scope in mobile technology. This technology can be used in many other fields and application such as Gaming, Maps, E -mail, Messaging, Photography and so on. One such area is crime area detection and storing criminal data record. A recent mobile application named Mobile Vic PD, released by the Victoria police in Canada for fighting crime. The mobile application can be used to report minor crimes, offer anonymous tips to police, stay updated on crimes in progress, receive missing child reports or check on stolen property. As the criminal data is not available remotely there is a communication gap between the police officials investigating any case. The disadvantage of this application was that it was prone to fake reporting of crime and there was no other way to verify that the incident was true. This caused chaos among the general public. This project focuses on providing a method for verifying the incident. Today mobile and information technology have become an integral part of our lives. A new area where mobile integrated with technology is useful for crime reporting since readily accessible information is not available at any point in investigation, which is a key drawback for communication in police department. Thus Using cloud, we will try to make all the information related to the criminals, Theft case, Missing Case available on the Android Application to the police during their investigation which would speed-up the entire process of tracking down the criminals. A mobile application is also made available to the common people in order to track down the Criminals and Possible of theft. Using this application the user can file the case through their Mobile Application. This will make the communication bridge between the People and the police.

This application will be useful for the remote access for the police of criminal data which will be helpful for the investigations carried by police department. Also, it will be useful to store the large amount of data and it will provide a easy way to get details of the crime happened. The Information will be stored on cloud to gain remote access. Because the Crime Rate has been rapidly increased So it is always safety to maintain a cloud server. This application will be useful for the remote access of criminal data which will be helpful for the investigations carried by police department. Also, it will provide the general users with the facilities like reporting any incidents which would lead to traffic jam. Moreover, it will also provide an alternate safe path on user's demand before entering the crime area.

The database for this project will be stored on cloud to gain remote access. For avoiding any false incidence to be notified to other user, the information provided will be first verified by the police officials. After approval of the information it will be broadcasted to other users using the application.

WEATHER PREDICTION SUMMARY USING MACHINE LEARNING ALGORITHMS

Submitted by

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A Project Report Submitted to
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In partial fulfillment of the requirements for the
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APRIL-2021

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This is to certify that the project entitled "WEATHER PREDICTION SUMMARY USING MACHINE LEARNING ALGORITHMS" is a bonafide work done by Selvi A.VISALI, Reg.No:2019PCS16 of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI- 627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

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Date: 09. 07. 21

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DECLARATION

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Station: Tirunelveli

Date : 22.04.2021

CANDIDATE

(VISALI.A)

1.SYNOPSIS

Weather forecasting has traditionally been done by physical models of the atmosphere, which are unstable to perturbations, and thus are inaccurate for large periods of time. Since machine learning techniques are more robust to perturbations, we explore their application to weather forecasting to potentially generate more accurate weather forecasts for large periods of time. The scope of this project was restricted to forecasting the maximum temperature and the minimum temperatures for given day, given weather data for the past one month for several cities. A Random Forest model and a variation on a functional regression model were used, with the latter able to capture trends in the weather. Both of our models were outperformed by professional weather forecasting services, although the discrepancy between our models and the professional ones diminished rapidly for forecasts of later days, and perhaps for even longer time scales our models might surpass skilled ones. The Random Forest model outperformed the functional regression model, suggesting that two days were too short for the latter to capture significant weather trends, and perhaps basing our forecasts on weather data for four or five days would allow the functional regression model to outperform the linear regression model. Traditionally, climate estimation has dependably been performed by considering the environment as a liquid. The current condition of the air is inspected. The future condition of the environment is registered by comprehending numerical conditions of thermodynamics and liquid elements. Yet, this conventional arrangement of differential conditions that oversee the physical model is some of the time shaky under unsettling influences and uncertainties while estimating the underlying states of the air. This prompts an inadequate comprehension of the environmental forms, so it limits climate forecast up to 10 day period, on the grounds that past that climate estimates are essentially unreliable.But Machine learning is moderately hearty to most barometric unsettling influences when contrasted with customary techniques. Another favorable position of machine learning is that it isn't reliant on the physical laws of environmental procedures.

1

In this report, a reenacted framework is created to foresee different climate conditions utilizing Data Analysis and Machine learning procedures, for example, straight relapse and strategic relapse. The primary wellspring of information to be utilized for directed taking in is to be gathered. The current climate condition parameters ex. temperature and so on are utilized to fit a model and further utilizing machine learning methods and extrapolating the data, the future varieties in the parameters are broke down. Predicting the Weather of day today changes without any visualizing tools. Using the previous data of weather changes per hour is given to the model so that it will predict the weather according to the previous past data's. Weather can be vary for every hour our dataset has every hour data so that machine will be trained more accurately. It will reduce the cost for equipments. Daily update of weather should be updated in the dataset so that we can get the accurate weather details.

YOUTUBE COMMENT SPAM DETECTION USING MACHINE LEARNING

Submitted by

N.DEVI BALA

Register Number: 2019PCS01

A Project Report Submitted to

SRI SARADA COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli – 627 012)

Institution recognized u/s 2(f) and 12(B) of UGC

Reaccredited with "A" grade by NAAC

(A branch of Sri Ramakrishna Tapovanam, Tirupparaithurai)

In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

Guided by

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DEPARTMENT OF COMPUTER SCIENCE,

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APRIL 2021

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INTERNAL GUIDE

M. Malarvizhi
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PRINCIPAL
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Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN (AUTONOMOUS), TIRUNELVELI-627 011 on 9.7. 2021

Place: Tirunelveli-627 011

Date: 9.7.2021

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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"YOUTUBE COMMENT SPAM DETECTION USING MACHINE LEARNING "** is my original work carried out under the guidance of **(Selvi).M.BALAKARTHIKA M.Sc.,** Sri Sarada College for Women(Autonomous) Tirunelveli-627 011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date: 22·04·2021

N·Devi Bala

CANDIDATE

(DEVI BALA.N)

1. SYNOPSIS

With the increased popularity of online social networks, spammers find these platforms easily accessible to trap users in malicious activities by posting spam messages. In this work, we have taken Twitter platform and performed spam tweets detection. To stop spammers, Google Safe Browsing and Twitter's BotMaker tools detect and block spam tweets. These tools can block malicious links, however they cannot protect the user in real-time as early as possible. Thus, industries and researchers have applied different approaches to make spam free social network platform. Some of them are only based on user-based features while others are based on tweet based features only. However, there is no comprehensive solution that can consolidate tweet's text information along with the user based features. To solve this issue, we propose a framework which takes the user and tweet based features along with the tweet text feature to classify the tweets. The benifit of using tweet text feature is that we can identify the spam tweets even if the spammer creates a new account which was not possible only with the user and tweet based features. We have evaluated our solution with four different machine learning algorithms namely - Support Vector Machine, Neural Network, Random Forest and Gradient Boosting. With Neural Network. we are able to achieve an accuracy of 91.65% and surpassed the existing solution by approximately 18%. The most popular machine learning methods (Bayesian Classification , k-NN, ANNs, SVMs) and of their applicability to the problem of spam-filtering. Nowadays, a great deal of communication takes place on electronic communication networks. On the one hand, it facilitates communication and dissemination of news, on the other hand it creates it is the spread of ideal soil for social spam. With more than two billion users The Face book platform is currently one of the main targets for spammers. An average of 54 billion spam e-mails was sent worldwide each day. Platform users are exposed to threats and inconveniences on a daily basis as malware spreads. We have presented various techniques in the social media to reduce spam, there can be implemented primarily on Twitter.

1

FACE DETECTION SECURITY WITH EMAIL WARNING USING DEEP LEARNING

Submitted by
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A Project Report Submitted to
**SRI SARADA COLLEGE FOR WOMEN
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In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

HAND · HEART · HEAD

Guided by
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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"FACE DETECTION SECURITY WITH EMAIL WARNING USING DEEP LEARNING"** is my original work carried out under the guidance of **Smt. P. ANITHA M.Sc., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date: 22 - 04 - 2021

V Preethi
CANDIDATE

(PREETHI. V)

1. SYNOPSIS

Today's institutions and organizations are facing major security issues consequently, they need several specially trained personnel to attain the desired security. These personnel, as human beings, make mistakes that might affect the level of security. So we need a system with an automated and efficient, Face recognition play a vital role in variety of applications from biometrics, surveillance, security, identification to the authentication. We are going to use the Local Binary Pattern to detect the person's identity. In this project we design and implement a smart security system for restricted area where access is limited to people help in minimizing human error except for whose faces are available in the training database. They have applications in image and video recognition, recommender systems, image classification, Image segmentation, medical image analysis, natural language processing, brain-computer interfaces, and financial time series. The Local Binary Pattern algorithm is a simple solution on face recognition problem, which can recognize both front face and side face. However, the recognition rate of Local binary Pattern Histogram algorithm under the conditions of illumination diversification, expression variation and attitude deflection is decreased.

To solve this problem, a modified Local Binary Pattern Histogram algorithm based on pixel neighborhood gray Median Local Binary Pattern Histogram is proposed. The gray value of the pixel is replaced by the median value of its neighborhood sampling value, and then the feature value is extracted by the sub blocks and the statistical histogram is established to form the Median Local Binary Pattern Histogram feature dictionary, which is used to recognize the human face identity compared with test image. Experiments are carried on Facial Recognition Technology (FERET) standard face database and the creation of new face database, and the results show that Median Local Binary Pattern Histogram algorithm is superior to Local Binary Pattern Histogram algorithm in recognition rate. Face recognition technology is an important research project in the field of computer vision and pattern recognition, it can identify the identities and other information according to the visual features of face image, having a very broad prospects for development. It is widely used in authentication, criminal investigation, video surveillance, robot intelligence and medical science and so on. It has wide application value and commercial value.

As a biological feature, facial features have the characteristics of good, direct and convenient compared with other biological features. Therefore, face recognition is more acceptable for users. The architecture performs a better fitting to the image dataset due to the reduction in the number of parameters involved and reusability of weights. In other words, the network can be trained to understand the sophistication of the image better.

Human beings perform face recognition automatically every day and practically with no effort. Although it sounds like a very simple task for us, it has proven to be a complex task for a computer, as it has many variables that can impair the accuracy of the methods, for example: illumination variation, low resolution, and occlusion, amongst other. In computer science, face recognition is basically the task of recognizing a person based on its facial image. It has become very popular in the last two decades, mainly because of the new methods developed and the high quality of the current videos/cameras. Face Detection it has the objective of finding the faces (location and size) in an image and probably extract them to be used by the face recognition algorithm. Face Recognition with the facial images already extracted, cropped, resized and usually converted to grayscale, the face recognition algorithm is responsible for finding characteristics which best describe the image. The face recognition systems can operate basically in two modes: Verification or authentication of a facial image basically compares the input facial image with the facial image related to the user which is requiring the authentication.

It is basically a 1x1 comparison. Identification or facial recognition it basically compares the input facial image with all facial images from a dataset with the aim to find the user that matches that face. It is basically a 1xN comparison. This system is composed of two parts: hardware part and software part. The hardware part consists of a camera, while the software part consists of face-detection and face-recognition algorithms software. When a person enters to the zone in question, a series of snapshots are taken by the camera and sent to the software to be analyzed and compared with an existing database of trusted people. A mail goes off if the user is not recognized. Experimental results demonstrate the effectiveness of proposed security system in order to restrict the unauthorized access and enhanced reliability by use of face recognition.

MYOCARDIAL INFARCTION PREDICTION USING DATA MINING WITH MACHINE LEARNING

Submitted by

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Reg No: 2019PCS10

A Project Report Submitted to
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In partial fulfillment of the requirements for the
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April 2021

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This is to certify that the project entitled "MYOCARDIAL INFARCTION PREDICTION USING DATA MINING WITH MACHINE LEARNING" is a bonafide work done by Selvi P. SARANYA, Reg.No:2019PCS10 of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

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DECLARATION

I hereby declare that the project work done for the award of the degree of "MASTER OF COMPUTER SCIENCE" on "MYOCARDIAL INFARCTION PREDICTION USING DATA MINING WITH MACHINE LEARNING" is my original work carried out under the guidance of **Smt. M. VijayaLakshmi M.Sc., M.Phil., SET.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

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Date: 22.04.2021

P. Saranya
CANDIDATE

(P. SARANYA)

1. SYNOPSIS

Myocardial Infarction is a threatening disease for survival. Therefore, early detection and prediction of such a disease are very essential for a healthy life. Coronary artery disease, stroke, and peripheral artery disease involve atherosclerosis. This may be caused by high blood pressure, smoking, diabetes mellitus, lack of exercise, obesity, high blood cholesterol, poor diet, and excessive alcohol consumption, among others. High blood pressure is estimated to account for approximately 13% of CVD deaths, while tobacco accounts for 9%, diabetes 6%, lack of exercise 6% and obesity 5%. Rheumatic heart disease may follow untreated strep throat. It is estimated that up to 90% of CVD may be preventable. Prevention of CVD involves improving risk factors through: healthy eating, exercise, avoidance of tobacco smoke and limiting alcohol intake. Treating risk factors, such as high blood pressure, blood lipids and diabetes is also beneficial. Treating people who have strep throat with antibiotics can decrease the risk of rheumatic heart disease. The use of aspirin in people, who are otherwise healthy, is of unclear benefit. Stenosis in the Coronary Arteries (CA) can be determined by using the Coronary Cineangiogram (CCA). It comes under the invasive image modality.

CCA is the most cost-effective method to justly detect and predict the stenosis as well as it is a fundamental diagnostic approach for assessing vascular malfunction. There are various visual degradations such as noise, low contrast, non-uniform illumination, epicardial motion in Coronary angiography which makes different uncertain stenosis during the angiograms based on medical diagnosis. It is evident that the clinical decisions dependent on angiography are emotional and lead to overestimation and underestimation of the identified stenosis. Consequently, such uncertain forecasting can affect unfortunately to the patients' personal satisfaction awkwardly. Cardiovascular diseases are the most common cause of death worldwide over the last few decades in the developed as well as underdeveloped and developing countries. Early detection of cardiac diseases and continuous supervision of clinicians can reduce the mortality rate. However, accurate detection of heart diseases in all cases and consultation of a patient for 24 hours by a doctor is not available since it requires more sapience, time and expertise. In this study, a tentative design of a cloud-based heart disease prediction system had been proposed to detect impending heart disease using Machine learning techniques. For the accurate

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detection of the heart disease, an efficient machine learning technique should be used which had been derived from a distinctive analysis among several machine learning algorithms. Machine Learning is used across many spheres around the world. The healthcare industry is no exception. Machine Learning can play an essential role in predicting presence/absence of Locomotor disorders, Heart diseases and more. Such information, if predicted well in advance, can provide important insights to doctors who can then adapt their diagnosis and treatment per patient basis. Algorithms like Random Forest, Support Vector Machine, Naïve Bayes and etc.,

IMAGE PROCESSING AND DATA MINING MONITORING IN PREDICTING THE DISEASE OF LEAF USING DEEP LEARNING

Submitted by

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Reg No: 2019PCS14

A Project Report Submitted to

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2019-2021

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APRIL-2021

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M. Vijayalakshmi

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Date: 9.7.2021

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DECLARATION

I hereby declare that the project work done for the award of the degree of "MASTER OF COMPUTER SCIENCE" on "IMAGE PROCESSING AND DATA MINING MONITORING IN PREDICTING THE DISEASE OF LEAF USING DEEP LEARNING" is my original work carried out under the guidance of **Smt. M.VIJAYALAKSHMI, M.Sc., M.Phil., SET.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

E. Suba Lakshmi.

Station: Tirunelveli   **CANDIDATE**

Date   : 22.04.2021   (SUBA LAKSHMI.E)

SYNOPSIS

India is fast developing country and agriculture is the back bone for the countries development in the early stages. Now a day's technology plays vital role in all the fields but till today we are using some old methodologies in agriculture. Identifying plant disease wrongly leads to huge loss of yield, time, money and quality of product. Identification of plant disease is very difficult in agriculture field. Leaf disease detection requires huge amount of work, knowledge in the plant diseases, and also require the more processing time. The objective of this research is to make use of significant features and prediction is done using computer vision technique. This method mainly download the image from the server then it converts the image into a grayscale by calculating its pixels and it shows out only the defected parts of the leaf.

First we need to select the plant which is affected by the disease and then collect the leaf of the plant and take a snapshot of leaf and load the leaf image into the system. It means representation of the image in more meaningful and easy to analyze way. In segmentation, a digital image is partitioned into multiple segments can defined as super-pixels. The main objective of this project is to find out whether the leaf is defected or not. If the leaf is in green color, then there is no defect in the leaf . if the leaf is spotted with black dots then it is shown to be affected by some disease and then we are predicting the disease of leaf and its lifetime is also too low.

This approach can significantly support an accurate detection of leaf disease. We can extend this approach by using image processing technique. It displays the output in graphical view that is X and Y coordinates. The user can also view the output in mobile application by retrieving the result from the server.

Developing countries like economy is mainly depends on agriculture. Due to plant diseases the quality and quantity of agriculture India the product is reduced. Some of the plant disease do not have visibility during early stage it only appears at that final stage. The purpose of agriculture is not only to feed ever growing population but it is an important source of energy and a solution to solve the problem of global warming.

Plant disease diagnose is very important in earlier stage in order to cure and control the disease. In this method experts are involved who have the ability to detect the changes in leaf color. Many times different experts identify the same disease as the different disease. This method requires continuous monitoring of experts. Depending on the applications, many systems have been proposed to solve or at least to reduce the problems, by making use of image processing we are also some of the automatic classification tool. Using this technique, we can easily segment the plant disease and also the affected part of the leaf can be found.   Python is a general-purpose interpreted, interactive, object-oriented, and high-level programming language. It was created by Guido van Rossum during 1985- 1990. Like Perl, Python source code is also available under the GNU General Public License (GPL). This tutorial gives enough understanding on Python programming language. Python is a high-level, interpreted, interactive and object-oriented scripting language. Python is designed to be highly readable. It uses English keywords frequently where as other languages use punctuation, and it has fewer syntactical constructions than other languages.

Python is Interpreted − Python is processed at runtime by the interpreter. You do not need to compile your program before executing it. This is similar to PERL and PHP. Python is Interactive − You can actually sit at a Python prompt and interact with the interpreter directly to write your programs. Python is Object-Oriented − Python supports Object-Oriented style or technique of programming that encapsulates code within objects.

HARVEST CROP YIELD PREDICTION USING DATA ANALYTICS WITH MACHINE LEARNING METHOD

Submitted by

P.JEGADEESWARI
Reg No: 2019PCS03

A Project Report Submitted to

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APRIL-2021

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This is to certify that the project entitled "HARVEST CROP YIELD PREDICTION USING DATA ANALYTICS WITH MACHINE LEARNING METHOD" is a bonafide work done by **Selvi P.JEGADEESWARI, Reg.No:2019PCS03** of **SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011,** in partial fulfillment of the requirements for the award of the degree of **MASTER OF COMPUTER SCIENCE** during the year 2020-2021.

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Place: Tirunelveli

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DECLARATION

I hereby declare that the project work done for the award of the degree of "MASTER OF COMPUTER SCIENCE" on "HARVEST CROP YIELD PEDICTION USING DATA ANALYTICS WITH MACHINE LEARNING METHOD" is my original work carried out under the guidance of (Smt). B.PARVATHI DEVI, M.C.A., M.Phil., Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

STATION: TIRUNELVELI

DATE: 22.04.2021

CANDIDATE

(P.JEGADEESWARI)

1. SYNOPSIS

In the era of internet and technology agriculture field of study requires attention in order to equip the farmers to maximize their output. In our country agriculture is the strength of the economy and growth and more than half of the population is living on the agriculture output. The crop yield is the major factor to decide the farmers earning and governments planning to meet the requirements to ensure the food security. Crop yield prediction will assist the farmers and other stakeholders for better crop planning i.e. selling, warehousing, market prices etc. Machine learning is one such technique employed to predict crop yield in agriculture. Various machine learning techniques such as prediction, classification, regression and clustering are utilizing to predict crop yield. There are various researchers working on this area and proposed several techniques to attain the accuracy for crop yield, but the utmost accuracy and error free information is still need the enhancement to extract data from the bigger data sets. An approach has been proposed for prediction of crop yield using machine learning technique. For the prediction, classification techniques like AdaBoost algorithm, XGBoost algorithm , StochasticGradientDescent algorithm will help the farmers to cut the losses, farmer suicides and also will improve the crop yield. This paper discusses and compares the various data analytics techniques available for the crop yield prediction. However, the selection of the appropriate algorithm from the pool of available algorithms imposes challenge to the researchers with respect to the chosen crop. The accuracy of training model should be higher and error rate should be minimum.

Crop yield is the field which plays an important role in improving our countries economy. Agriculture is the one which gave birth to civilization. India is an agrarian country and its economy largely based upon crop productivity. Hence we can say that agriculture can be backbone of all business in our country. Selecting of every crop is very important in the agriculture planning. The selection of crops will depend upon the different parameters such as marketprice, production rate and the different government policies. Many changes are reuired in the agriculture field to improve changes in our india economy. We can improve agriculture by using machine learning techniques which are applied easily on farming sector. Along with all advances in the machines and technologies used in farming, useful and accurate information about different matters also plays a significant role in it. The concept of implement the crop selection method so that this method helps in solving many agriculture and farmers problems. This improves our Indian economy by maximizing the yield rate of crop production.

GEO SPATIAL INFORMATION SOLUTION AND UPSHOT

Submitted by

N.ROHINI
Reg No: 2019PCS08

A Project Report Submitted to
SRI SARADA COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli – 627 011)
Institution recognised u/s 2(f) and 12(B) of UGC Reaccredited with "A" grade by NAAC
(A branch of Sri Ramakrishna Tapovanam, Tirupparaithurai)

In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

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APRIL 2021

CERTIFICATE

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INTERNAL GUIDE

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PRINCIPAL 20/4/2021
PRINCIPAL
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TIRUNELVELI -.627 011

Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN (Autonomous), TIRUNELVELI-627011 on _09.07.2021_

Place: Tirunelveli-627 011

Date: 09.07.2021

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STATION: TIRUNELVELI

DATE   : 22.04.2021

CANDIDATE

(N.ROHINI)

SYNOPSIS

Local bodies like municipalities need collect different kind of taxes from the citizens. Every citizen need to pay Water Bills and Electricity Bills to the particular authorities. Actually a citizen want to pay his municipal tax means he should go to municipal office and collect the necessary bill, pay there only. Same as water and electricity bills. In the existing system they have created a web service for each department individually. This is not an easy job to get all these tax information in different authorities now days. For that purpose we are developing this application, which can collect the tax information from different authorities based on the house number and owner name by using **Web Services** and stores the data in our own database. Web services play vital role here. For getting the information regarding taxes citizens need to register first. The bills are calculated. It combines the water bill, electricity bill and calculate the total payment which suite to the person on different modes. It creates a system which register complaints such as potholes, street light malfunctioning, maintaining sanitation and hygiene of public places and maintenance these complaints are viewed by admin and respective updates are received through mail to the citizen and also he/she can view the status of the complaint in his/her profile. By using the user id and password citizens can log into the system and collect the necessary information.

The system makes the overall project management much easier and flexible. The automated system will provide for reliable services. There no burden of calculating water, electric, house tax bills in this system. Authentication is provided for this application, only registered users can access. Admin enter his user id and password for login. The user identification is that which is required by the server for access to its file system. This command will normally be the first command transmitted by the user after the control connections are made. Since password information is quite sensitive. The system is going to show the Bill information of different authorities.

The system is designed to be a user friendly one. In other words the system has been designed to communicate effectively with the user. The system has been designed with menus. Data validations have been included in the system in almost every area where there is a possibility for the user to commit errors. This application must be able to produce output at different modules for different inputs.

FIRE DETECTION FROM REAL TIME VIDEO USING DEEP LEARNING

Submitted by

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In partial fulfillment of the requirements for the
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MASTER OF COMPUTER SCIENCE
2019-2021

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APRIL 20-21

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Place: Tirunelveli-627 011

Date: 9.7.2021

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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"FIRE DETECTION FROM REAL TIME VIDEO USING DEEP LEARNING"** is my original work carried out under the guidance of **(Smt).B.PARVATHI DEVI, MCA., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627 011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

STATION : TIRUNELVELI

DATE: 22.04.2021

P. Shunmuga Vadivoo

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(P .SHUNMUGA VADIVOO)

1.SYNPOSIS

Detecting fire from visual scenes is a demanding task, due to the high variance of the colour and texture. A number of fire image classification approaches have been proposed to overcome this problem however, most of them rely on either rule based methods or on handcrafted features. Propose a novel deep learning Resnet50 algorithm to achieve high-accuracy fire image detection. Instead of using traditional rectified linear units or tangent functions, use adaptive piece wise linear units in the hidden layers of the network. Also create a new small dataset of fire images to train and evaluate our model. To solve the over fitting problem caused by training the network on a limited dataset, which improve the number of available training images using traditional data augmentation techniques and generative Adversarial networks. This paper presents a comparative analysis of state-of-the art image processing-based fire colour detection rules and methods in the context of geometrical characteristics measurement of wild land fires. Two new rules and two new detection methods using an intelligent combination of the rules are presented, and their performances are compared with their counterparts.

The benchmark is performed on approximately two hundred million fire pixels and seven hundred million non-fire pixels extracted from five hundred wild land images under diverse imaging conditions. The fire pixels are categorized according to fire color and existence of Fire; meanwhile, non-fire pixels are categorized according to the average intensity of the corresponding image. This characterization allows to analysis the performance of each rule by category. It is shown that the performances of the existing rules and methods from the literature are category dependent, and none of them is able to perform equally well on all categories. Means while, a new proposed method based on machine learning techniques and using all the rules as features outperforms existing state-of-the-art techniques in the literature by performing almost equally well on different categories. Thus, this method, promises very interesting developments for the future of Metrologic tools for fire detection in unstructured environments.

1

Research on video analysis for fire detection has become a hot topic in computer vision. However, the Resnet50 algorithms use exclusively rule-based models and features vector to classify whether a frame is fire or not. These features are difficult to define and depend largely on the kind of fire observed. The outcome leads to low detection rate and high false-alarm rate. A different approach for this problem is to use a learning algorithm to extract the useful features instead of using an expert to build them.

SARCASAM WITH POLARITY USING MACHINE LEARNING

Submitted by

M. KANAGA LAKSHMI

Reg No: 2019PCS04

A Project Report Submitted to

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In partial fulfillment of the requirements for the
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2019-2021

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APRIL 2021

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V. Vallinayagi

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INTERNAL GUIDE

M. Malarvizhi

PRINCIPAL 20/4/2021

PRINCIPAL
SRI SARADA COLLEGE FOR WOMEN
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TIRUNELVELI - 627 011

Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI on

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Place: Tirunelveli

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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE "on "SARCASAM WITH POLARITY USING MACHINE LEARNING"** is my original work carried out under the guidance of **Smt. P. ANITHA, M.Sc., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilandu, India. The data and reports are true and correct to the best of my knowledge.

Station : Tirunelveli

Date   : 22.04.2021

M. Kanagahmi

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(KANAGA LAKSHMI. M)

1. SYNOPSIS

In today's information-saturated world, it's a challenge for businesses to keep on top of all the tweets, emails, product feedback and support tickets that pour in every day at every place. The need for automatic extraction of document information has become prominent in information organization and knowledge discovery. Thus, here we used text analysis, Text analysis is the automated process of understanding unstructured text data and making it easier to manage. It is a classic example of machine learning. Text analysis is one such solution, where in the natural language text is assigned to one or more predefined categories based on the content. This work focuses on sentimental analysis and emotion detection also known as opinion mining. It is a way of automatically extracting and analysing the emotions and opinions, and not facts, of messages and posts. A classification architecture is proposed, which consists of major modules such as data cleaning and pre-processing, feature selection, and classifier training that includes a classified prediction model. In this study, logistic Regression and naive bayes classifier is used in these experiments, which evaluate the performance of the proposed classified architecture by analysing the sentimental, emotions and opinions of public twitter data using and public survey data. Logistic regression and naive bayes classifier, significantly improve prediction accuracy over the other classification algorithm. This proposed classification architecture, with the various feature selection techniques described and used, are significant, and are readily applicable to many other areas of sentimental analysis such as Fine-grained Sentimental Analysis, Aspect-based Sentimental Analysis, Emotion detection, Intent analysis, Multilingual sentimental analysis.

Sarcasm is a sophisticated form of irony widely used in social networks and micro-blogging websites. It is sometimes wont to convey implicit data inside the message an individual transmits. Sarcasm can be used for various functions like criticism or mockery. However, it's onerous even for humans to acknowledge. Therefore, recognizing sardonic statements is terribly helpful to enhance automatic sentimental analysis of information collected from micro blogging websites or social networks. Sentimental analysis refers to the Identification and aggregation of attitudes and opinions expressed by Internet users towards a Specific topic. In this project, we tend to propose a pattern-based approach to observe humor on Twitter.

We propose four sets of options that cowl the various forms of humor we tend to defined. We use those to classify tweets as sardonic and non-sarcastic. Our projected approach reaches associate accuracy of eighty-three .1% with a precision equal to 91.1%. We conjointly study the importance of every of the projected sets of options and measure its side price to the classification. In particular we tend to emphasize the importance of pattern-based options for the detection of sardonic statements.

In the implemented system, tweets are collected and sentimental analysis is performed on them. Based on the results of sentimental analysis few suggestions can be provided to the user.

PERFORMANCE OF A WEB APPLICATION TO PREDICT DIABETES DISEASE AN APPROACH USING MACHINE LEARNING ALGORITHM

Submitted by

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This is to certify that the project entitled "PERFORMANCE OF A WEB APPLICATION TO PREDICT DIABETES DISEASE AN APPROACH USING MACHINE LEARNING" is a bonafide work done by Selvi S.NAMBI RAJATHI, Reg.No:2019PCS05of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"PERFORMANCE OF A WEB APPLICATION TO PREDICT DIABETES DISEASE AN APPROACH USING MACHINE LEARNING "** is my original work carried out under the guidance of **(Selvi). S.RAMALAKSHMI, M.Sc., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

S. Nambi Rajathi

STATION: TIRUNELVELI

DATE: 22 - 04 - 2021

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1. SYNPOSIS

Diabetes is a chronic disease with the potential to cause a worldwide health care crisis. According to International Diabetes Federation 382 million people are living with diabetes across the whole world. By 2035, this will be doubled as 592 million. Diabetes mellitus or simply diabetes is a disease caused due to the increase level of blood glucose. Accurate detection of diabetes diseases in all cases and consultation of a patient for 24 hours by a doctor is not available since it requires more sapience, time and expertise. In this study, a tentative design of a cloud-based diabetes disease prediction system had been proposed to detect impending diabetes disease using Machine learning techniques. For the accurate detection of the diabetes disease, an efficient machine learning technique should be used which had been derived from a distinctive analysis among several machine learning algorithms. Machine Learning is used across many spheres around the world. The healthcare industry is no exception. Machine Learning can play an essential role in predicting presence/absence of Locomotor disorders, Diabetes diseases and more. Such information, if predicted well in advance, can provide important insights to doctors who can then adapt their diagnosis and treatment per patient basis. Algorithms like Random Forest, Logistic regression, Decision Tree, Naïve Bayes, SVM etc.

Diabetes is caused due to the excessive of sugar condensed into the blood .Currently, it is considered as one of the lethal disease in the world. People all around the globe are affected by this serve disease knowingly or unknowingly. Other disease like heart attack, paralyzed , kidney disease, blindness and analyzing diabetes. Usual identifying process for diabetic patients needs more time and money. But with the rise of machine learning, we have that ability to develop an architecture which has the capability to predict where the patient has diabetes or not. Our main aim of this exploration is to build web application based on the higher prediction accuracy of some powerful machine learning algorithm. We have used a benchmark dataset namely Pima Indian which is capable of predicting the onset of diabetes based on diagnostics manner. With an accuracy of 82.35% prediction rate Artificial Neural Network (ANN) shows a significant improvement of accuracy which drives us to develop an Interactive Web Application for Diabetes Prediction.

Several studies have shown the effectiveness of mobile technologies in glycemic control and improvement of diabetic's management. These tools require patient and physician's commitment to ensure its success. However, mobile health applications (Apps) for diabetes management are not used in Morocco. In this study, we aim to evaluate the feasibility and acceptance of an App for intervention and clinical decision making for type 2 diabetics. Tow cross sectional studies were conducted among physicians and diabetics patients, recruited from health care centers in the region of fez. 272 type 2 diabetics participated in the patient survey. 82% patients think that a mobile App can help them manage diabetes. 103 general physicians responded to the physician questionnaire. The majority (83.5%) practiced in urban area. Only three physicians, use an electronic medical record for following up their patients. 72.8% of physicians owned a smartphone and had access to internet, 16.5% of them often downloaded health App. 89.3% believed that an App could contribute to the reorganization of diabetes management and most of them said that they would certainly use a diabetes app to manage patients once is implemented. Furthermore, physicians could spend a part of their time, sharing information with their diabetic patients via this App. Based on the results of this study, the establishment and use of a mobile application is acceptable by both patients and general practitioners of the primary health care network for following-up and management of their diabetic patients.

SEMANTIC- BASED COMPOUND KEYWORD SEARCH OVER ENCRYPTED CLOUD DATA

Submitted by

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Reg No: 2019PCS11

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2019-2021

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DECLARATION

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CANDIDATE

(SEETHA LAKSHMI S)

STATION: TIRUNELVELI

DATE: 22-04-2021

1. SYNOPSIS

With the recent explosive growth of the amount of content on the Internet, it has become increasingly difficult for users to find and utilize information and for content providers to classify and catalog documents. Traditional web search engines often return hundreds or thousands of results for a search, which is time consuming for users to browse. On-line libraries, search engines, and other large document repositories *(e.g.* customer support databases, product specification databases, press release archives, news story archives, *etc.)* are growing so rapidly that it is difficult and costly to categorize every document manually. In order to deal with these problems, a look towards automated methods of working with web documents so that they can be more easily browsed, organized, and cataloged with minimal human intervention. In contrast to the highly structured tabular data upon which most machine learning methods are expected to operate, web and text documents are semi-structured. Web documents have well-defined structures such as letters, words, sentences, paragraphs, sections, punctuation marks, HTML tags, and so forth. It is estimated that as much as 85% of all digital business information, most of it web-related, is stored in non-structured formats (*i e .* non-tabular formats, such as those that are used in databases and spreadsheets).

Developing improved methods of performing machine learning techniques on this vast amount of non-tabular, semi-structured web data is therefore highly desirable. Clustering and classification have been useful and active areas of machine learning research that promise to help us cope with the problem of *Graph-Theoretic Techniques for Web Content Mining* information overload on the Internet. With clustering the goal is to separate a given group of data items (the data set) into groups called clusters such that items in the same cluster are similar to each other and dissimilar to the items in other clusters. In clustering methods no labeled examples are provided in advance for training (this is called unsupervised learning). Under classification we attempt to assign a data item to a predefined category based on a model that is created from pre-classified training data (supervised learning). In more general terms, both clustering and classification come under the area of knowledge discovery in databases or data mining. Applying data mining techniques to web page content is referred to as web content mining which is a new sub-area of web mining, partially built upon the established field of information retrieval. When representing text and web document content for clustering and classification, a vector-space model is typically used. In this model, each possible term that can appear in a document becomes a feature dimension. The value assigned to each dimension of a document may indicate the number of times the corresponding term appears on it or it may be a weight that takes into account other frequency information, such as the number of documents upon which the terms appear. This model is simple and allows the use of traditional machine learning methods that deal with numerical feature vectors in a Euclidean feature space. However, it discards information such as the order in which the terms appear, where in the document the terms appear, how close the terms are to each other, and so forth.

PREDICTION OF MULTI LUNG DISEASES BY X-RAY USING DEEP LEARNING

Submitted by

V. SANKARA PRIYA

Reg No: 2019PCS09

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(Affiliated to Manonmaniam Sundaranar University, Tirunelveli - 627012)

Institution recognized u/s 2(f) and 12(B) of UGC

Reaccredited with "A" grade by NAAC

(A branch of Sri Ramakrishna Tapovanam, Tirupparaithurai)

In partial fulfilment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE

2019-2021

Guided by

Selvi. P. SANKARA PARVATHY, M.Sc., M.Phil.,

DEPARTMENT OF COMPUTER SCIENCE,

SRI SARADA COLLEGE FOR WOMEN (AUTONOMOUS)

TIRUNELVELI-11.

APRIL 2021

CERTIFICATE

This is to certify that the project entitled "PREDICTION OF MULTI LUNG DISEASES BY X-RAY USING DEEP LEARNING" is a bonafide work done by Selvi. V.SANKARA PRIYA, Reg.No:2019PCS09 of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627011, in partial fulfilment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

HEAD OF THE DEPARTMENT   **INTERNAL GUIDE**

Dr. V. VALLINAYAGI
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M. Malarvizhi

PRINCIPAL 20/4/2021

PRINCIPAL
SRI SARADA COLLEGE FOR WOMEN
(Autonomous)
TIRUNELVELI - 627 011

Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI on

09.07.2021

Place: Tirunelveli

Date: 09.07.2021

1. R. ____ 9/7/2021
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(External Examiners)

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V. SANKARA PRIYA

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Tamilnadu, India.

DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** entitled **"PREDICTION OF MULTI LUNG DISEASES BY X-RAY USING DEEP LEARNING"** is my original work carried out under the guidance of **Selvi. P. SANKARA PARVATHY M.Sc., M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

V. Sankara Priya.

CANDIDATE

(V. SANKARA PRIYA)

Station: Tirunelveli

Date: 22-04-2021

1. SYNOPSIS

In this project, we address the problem of medical data scarcity by considering the task of
etection of pulmonary diseases from chest X-Ray images using small volume datasets with less
1an thousand samples. We implemented three deep convolutional neural networks (VGG16,
esNet-50, and InceptionV3) pre-trained on the ImageNet dataset and assessed them in lung
isease classification tasks using transfer learning approach. We created a pipeline that
egmented chest X-Ray (CXR) images prior to classifying them and we compared the
erformance of our framework with the existing ones. We demonstrated that pre-trained models
nd simple classifiers such as shallow neural networks can compete with the complex systems.
Ve also validated our framework on the publicly available Shenzhen and Montgomery lung
atasets and compared its performance to the currently available solutions. Our method was able
o reach the same level of accuracy as the best performing models trained on the Montgomery
ataset. However, the advantage of our approach is in smaller number of trainable parameters.
urthermore, our InceptionV3 based model almost tied with the best performing solution on the
henzhen dataset despite being computationally less expensive. Chest X-Rays of COVID-19 and
neumonia Tuberculosis and Bronchitis Chronic patients have proved to be an important
lternative indicator in Disease's screening. But again, accuracy depends upon radiological
xpertise. A diagnosis recommender system that can assist the doctor to examine the lung images
f the patients will reduce the diagnostic burden of the doctor. Deep Learning techniques
pecifically Convolution Neural Networks (CNN) have proven successful in medical imaging
lassification. Four different deep CNN architectures were investigated on images of chest X-
Rays for diagnosis of disease. These models have been pre-trained on the Keras and tensor flow
Image Net database thereby reducing the need for large training sets as they have pre-trained
weights. It was observed that CNN based architectures have the potential for diagnosis of disease.

A GRAPH BASED CLUSTERING APPROACH FOR RELATION EXTRACTION FROM CRIME DATA

Submitted by

S. SOMA SANKARI @ SOWMYA

Reg No: 2019PCS13

A Project Report Submitted to

SRI SARADA COLLEGE FOR WOMEN

(AUTONOMOUS)

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli - 627012)

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Reaccredited with "A" grade by NAAC

(A branch of Sri Ramakrishna Tapovanam, Tirupparaithurai)

In partial fulfillment of the requirements for the

Award of the degree of

MASTER OF COMPUTER SCIENCE

2019-2021

Guided by

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TIRUNELVELI-11.

APRIL 2021

CERTIFICATE

This is to certify that the project entitled "A GRAPH BASED CLUSTERING APPROACH FOR RELATION EXTRACTION FROM CRIME DATA" is a bonafide work done by Selvi S.SOMA SANKARI @ SOWMYA, Reg.No:2019PCS13 of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

V. Valli ay g'

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N. Valli ay g'

INTERNAL GUIDE

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PRINCIPAL 20/4/2021

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Place: Tirunelveli

Date: 9.7.2021

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(External Examiners)

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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"A GRAPH BASED CLUSTERING APPROACH FOR RELATION EXTRACTION FROM CRIME DATA"** is my original work carried out under the guidance of **Dr(Smt). V. VALLINAYAGI, M.Sc., M.Phil., Ph.D.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station : Tirunelveli

Date   : 22-04-2021

S. Soma Sankari @Sowmya

CANDIDATE

(SOMA SANKARI @ SOWMYA. S)

1. SYNOPSIS

Today's era is seeking a great scope in mobile technology. This technology can be used in many other fields and application such as Gaming, Maps, E -mail, Messaging, Photography and so on. One such area is crime area detection and storing criminal data record. A recent mobile application named Mobile Vic PD, released by the Victoria police in Canada for fighting crime. The mobile application can be used to report minor crimes, offer anonymous tips to police, stay updated on crimes in progress, receive missing child reports or check on stolen property. As the criminal data is not available remotely there is a communication gap between the police officials investigating any case. The disadvantage of this application was that it was prone to fake reporting of crime and there was no other way to verify that the incident was true. This caused chaos among the general public. This project focuses on providing a method for verifying the incident. Today mobile and information technology have become an integral part of our lives. A new area where mobile integrated with technology is useful for crime reporting since readily accessible information is not available at any point in investigation, which is a key drawback for communication in police department. Thus Using cloud, we will try to make all the information related to the criminals, Theft case, Missing Case available on the Android Application to the police during their investigation which would speed-up the entire process of tracking down the criminals. A mobile application is also made available to the common people in order to track down the Criminals and Possible of theft. Using this application the user can file the case through their Mobile Application. This will make the communication bridge between the People and the police.

This application will be useful for the remote access for the police of criminal data which will be helpful for the investigations carried by police department. Also, it will be useful to store the large amount of data and it will provide a easy way to get details of the crime happened. The Information will be stored on cloud to gain remote access. Because the Crime Rate has been rapidly increased So it is always safety to maintain a cloud server. This application will be useful for the remote access of criminal data which will be helpful for the investigations carried by police department. Also, it will provide the general users with the facilities like reporting any incidents which would lead to traffic jam. Moreover, it will also provide an alternate safe path on user's demand before entering the crime area.

The database for this project will be stored on cloud to gain remote access. For avoiding any false incidence to be notified to other user, the information provided will be first verified by the police officials. After approval of the information it will be broadcasted to other users using the application.

WEATHER PREDICTION SUMMARY USING MACHINE LEARNING ALGORITHMS

Submitted by

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Reg No: 2019PCS16

A Project Report Submitted to
SRI SARADA COLLEGE FOR WOMEN
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In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

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APRIL-2021

CERTIFICATE

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INTERNAL GUIDE

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Date: **09. 07. 21**

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DECLARATION

I hereby declare that the project work done for the award of the degree of "**MASTER OF COMPUTER SCIENCE**" on "**WEATHER PREDICTION SUMMARY USING MACHINE LEARNING ALGORITHM**" is my original work carried out under the guidance of M.VIJAYALAKSHMI,M.Sc.,M.Phil.,SET., Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date : 22.04.2021

CANDIDATE

(VISALI.A)

1.SYNOPSIS

Weather forecasting has traditionally been done by physical models of the atmosphere, which are unstable to perturbations, and thus are inaccurate for large periods of time. Since machine learning techniques are more robust to perturbations, we explore their application to weather forecasting to potentially generate more accurate weather forecasts for large periods of time. The scope of this project was restricted to forecasting the maximum temperature and the minimum temperatures for given day, given weather data for the past one month for several cities. A Random Forest model and a variation on a functional regression model were used, with the latter able to capture trends in the weather. Both of our models were outperformed by professional weather forecasting services, although the discrepancy between our models and the professional ones diminished rapidly for forecasts of later days, and perhaps for even longer time scales our models might surpass skilled ones. The Random Forest model outperformed the functional regression model, suggesting that two days were too short for the latter to capture significant weather trends, and perhaps basing our forecasts on weather data for four or five days would allow the functional regression model to outperform the linear regression model. Traditionally, climate estimation has dependably been performed by considering the environment as a liquid. The current condition of the air is inspected. The future condition of the environment is registered by comprehending numerical conditions of thermodynamics and liquid elements. Yet, this conventional arrangement of differential conditions that oversee the physical model is some of the time shaky under unsettling influences and uncertainties while estimating the underlying states of the air. This prompts an inadequate comprehension of the environmental forms, so it limits climate forecast up to 10 day period, on the grounds that past that climate estimates are essentially unreliable.But Machine learning is moderately hearty to most barometric unsettling influences when contrasted with customary techniques. Another favorable position of machine learning is that it isn't reliant on the physical laws of environmental procedures.

1

In this report, a reenacted framework is created to foresee different climate conditions utilizing.Data Analysis and Machine learning procedures, for example, straight relapse and strategic relapse.The primary wellspring of information to be utilized for directed taking in is to be gathered. The current climate condition parameters ex. temperature and so on are utilized to fit a model and further utilizing machine learning methods and extrapolating the data, the future varieties in the parameters are broke down. Predicting the Weather of day today changes without any visualizing tools. Using the previous data of weather changes per hour is given to the model so that it will predict the weather according to the previous past data's. Weather can be vary for every hour our dataset has every hour data so that machine will be trained more accurately. It will reduce the cost for equipments. Daily update of weather should be updated in the dataset so that we can get the accurate weather details.

YOUTUBE COMMENT SPAM DETECTION USING MACHINE LEARNING

Submitted by

N.DEVI BALA

Register Number: 2019PCS01

A Project Report Submitted to

SRI SARADA COLLEGE FOR WOMEN

(AUTONOMOUS)

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2019-2021

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APRIL 2021

CERTIFICATE

This is to certify that the project entitled "YOUTUBE COMMENT SPAM DETECTION USING MACHINE LEARNING" is a bonafide work done by Selvi N. DEVI BALA, Reg.No: 2019PCS01 of SRI SARADA COLLEGE FOR WOMEN (AUTONOMOUS), TIRUNELVELI-627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2019-2021.

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PRINCIPAL 20/4/2021

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Place: Tirunelveli-627 011

Date: 9.7.2021

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N.DEVI BALA

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Tamilnadu, India.

DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"YOUTUBE COMMENT SPAM DETECTION USING MACHINE LEARNING "** is my original work carried out under the guidance of **(Selvi).M.BALAKARTHIKA M.Sc.,** Sri Sarada College for Women(Autonomous) Tirunelveli-627 011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date: 22·04·2021

N·Devi Bala

CANDIDATE

(DEVI BALA.N)

1. SYNOPSIS

With the increased popularity of online social networks, spammers find these platforms easily accessible to trap users in malicious activities by posting spam messages. In this work, we have taken Twitter platform and performed spam tweets detection. To stop spammers, Google Safe Browsing and Twitter's BotMaker tools detect and block spam tweets. These tools can block malicious links, however they cannot protect the user in real-time as early as possible. Thus, industries and researchers have applied different approaches to make spam free social network platform. Some of them are only based on user-based features while others are based on tweet based features only. However, there is no comprehensive solution that can consolidate tweet's text information along with the user based features. To solve this issue, we propose a framework which takes the user and tweet based features along with the tweet text feature to classify the tweets. The benifit of using tweet text feature is that we can identify the spam tweets even if the spammer creates a new account which was not possible only with the user and tweet based features. We have evaluated our solution with four different machine learning algorithms namely - Support Vector Machine, Neural Network, Random Forest and Gradient Boosting. With Neural Network, we are able to achieve an accuracy of 91.65% and surpassed the existing solution by approximately 18%. The most popular machine learning methods (Bayesian Classification , k-NN, ANNs, SVMs) and of their applicability to the problem of spam-filtering. Nowadays, a great deal of communication takes place on electronic communication networks. On the one hand, it facilitates communication and dissemination of news, on the other hand it creates it is the spread of ideal soil for social spam. With more than two billion users The Face book platform is currently one of the main targets for spammers. An average of 54 billion spam e-mails was sent worldwide each day. Platform users are exposed to threats and inconveniences on a daily basis as malware spreads. We have presented various techniques in the social media to reduce spam, there can be implemented primarily on Twitter.

1

MYOCARDIAL INFARCTION PREDICTION USING DATA MINING WITH MACHINE LEARNING

Submitted by

P. SARANYA
Reg No: 2019PCS10

A Project Report Submitted to

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2019-2021

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April 2021

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This is to certify that the project entitled "MYOCARDIAL INFARCTION PREDICTION USING DATA MINING WITH MACHINE LEARNING" is a bonafide work done by Selvi P. SARANYA, Reg.No:2019PCS10 of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

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M. Vijayalakshmi

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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"MYOCARDIAL INFARCTION PREDICTION USING DATA MINING WITH MACHINE LEARNING"** is my original work carried out under the guidance of **Smt. M. VijayaLakshmi M.Sc., M.Phil., SET.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date: 22.04.2021

P. Saranya

CANDIDATE

(P. SARANYA)

1. SYNOPSIS

Myocardial Infarction is a threatening disease for survival. Therefore, early detection and prediction of such a disease are very essential for a healthy life. Coronary artery disease, stroke, and peripheral artery disease involve atherosclerosis. This may be caused by high blood pressure, smoking, diabetes mellitus, lack of exercise, obesity, high blood cholesterol, poor diet, and excessive alcohol consumption, among others. High blood pressure is estimated to account for approximately 13% of CVD deaths, while tobacco accounts for 9%, diabetes 6%, lack of exercise 6% and obesity 5%. Rheumatic heart disease may follow untreated strep throat. It is estimated that up to 90% of CVD may be preventable. Prevention of CVD involves improving risk factors through: healthy eating, exercise, avoidance of tobacco smoke and limiting alcohol intake. Treating risk factors, such as high blood pressure, blood lipids and diabetes is also beneficial. Treating people who have strep throat with antibiotics can decrease the risk of rheumatic heart disease. The use of aspirin in people, who are otherwise healthy, is of unclear benefit. Stenosis in the Coronary Arteries (CA) can be determined by using the Coronary Cineangiogram (CCA). It comes under the invasive image modality.

CCA is the most cost-effective method to justly detect and predict the stenosis as well as it is a fundamental diagnostic approach for assessing vascular malfunction. There are various visual degradations such as noise, low contrast, non-uniform illumination, epicardial motion in Coronary angiography which makes different uncertain stenosis during the angiograms based on medical diagnosis. It is evident that the clinical decisions dependent on angiography are emotional and lead to overestimation and underestimation of the identified stenosis. Consequently, such uncertain forecasting can affect unfortunately to the patients' personal satisfaction awkwardly. Cardiovascular diseases are the most common cause of death worldwide over the last few decades in the developed as well as underdeveloped and developing countries. Early detection of cardiac diseases and continuous supervision of clinicians can reduce the mortality rate. However, accurate detection of heart diseases in all cases and consultation of a patient for 24 hours by a doctor is not available since it requires more sapience, time and expertise. In this study, a tentative design of a cloud-based heart disease prediction system had been proposed to detect impending heart disease using Machine learning techniques. For the accurate

detection of the heart disease, an efficient machine learning technique should be used which had been derived from a distinctive analysis among several machine learning algorithms. Machine Learning is used across many spheres around the world. The healthcare industry is no exception. Machine Learning can play an essential role in predicting presence/absence of Locomotor disorders, Heart diseases and more. Such information, if predicted well in advance, can provide important insights to doctors who can then adapt their diagnosis and treatment per patient basis. Algorithms like Random Forest, Support Vector Machine, Naïve Bayes and etc.,

FACE DETECTION SECURITY WITH EMAIL WARNING USING DEEP LEARNING

Submitted by
V. PREETHI
Reg No: 2019PCS07

A Project Report Submitted to
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APRIL 2021

CERTIFICATE

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TIRUNELVELI - 627 011

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Place: Tirunelveli

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DECLARATION

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Station: Tirunelveli

Date: 22 - 04 - 2021

V Preethi
CANDIDATE

(PREETHI. V)

1. SYNOPSIS

Today's institutions and organizations are facing major security issues consequently, they need several specially trained personnel to attain the desired security. These personnel, as human beings, make mistakes that might affect the level of security. So we need a system with an automated and efficient, Face recognition play a vital role in variety of applications from biometrics, surveillance, security, identification to the authentication. We are going to use the Local Binary Pattern to detect the person's identity. In this project we design and implement a smart security system for restricted area where access is limited to people help in minimizing human error except for whose faces are available in the training database. They have applications in image and video recognition, recommender systems, image classification, Image segmentation, medical image analysis, natural language processing, brain-computer interfaces, and financial time series. The Local Binary Pattern algorithm is a simple solution on face recognition problem, which can recognize both front face and side face. However, the recognition rate of Local binary Pattern Histogram algorithm under the conditions of illumination diversification, expression variation and attitude deflection is decreased.

To solve this problem, a modified Local Binary Pattern Histogram algorithm based on pixel neighborhood gray Median Local Binary Pattern Histogram is proposed. The gray value of the pixel is replaced by the median value of its neighborhood sampling value, and then the feature value is extracted by the sub blocks and the statistical histogram is established to form the Median Local Binary Pattern Histogram feature dictionary, which is used to recognize the human face identity compared with test image. Experiments are carried on Facial Recognition Technology (FERET) standard face database and the creation of new face database, and the results show that Median Local Binary Pattern Histogram algorithm is superior to Local Binary Pattern Histogram algorithm in recognition rate. Face recognition technology is an important research project in the field of computer vision and pattern recognition, it can identify the identities and other information according to the visual features of face image, having a very broad prospects for development. It is widely used in authentication, criminal investigation, video surveillance, robot intelligence and medical science and so on. It has wide application value and commercial value.

As a biological feature, facial features have the characteristics of good, direct and convenient compared with other biological features. Therefore, face recognition is more acceptable for users. The architecture performs a better fitting to the image dataset due to the reduction in the number of parameters involved and reusability of weights. In other words, the network can be trained to understand the sophistication of the image better.

Human beings perform face recognition automatically every day and practically with no effort. Although it sounds like a very simple task for us, it has proven to be a complex task for a computer, as it has many variables that can impair the accuracy of the methods, for example: illumination variation, low resolution, and occlusion, amongst other. In computer science, face recognition is basically the task of recognizing a person based on its facial image. It has become very popular in the last two decades, mainly because of the new methods developed and the high quality of the current videos/cameras. Face Detection it has the objective of finding the faces (location and size) in an image and probably extract them to be used by the face recognition algorithm. Face Recognition with the facial images already extracted, cropped, resized and usually converted to grayscale, the face recognition algorithm is responsible for finding characteristics which best describe the image. The face recognition systems can operate basically in two modes: Verification or authentication of a facial image basically compares the input facial image with the facial image related to the user which is requiring the authentication.

It is basically a 1x1 comparison. Identification or facial recognition it basically compares the input facial image with all facial images from a dataset with the aim to find the user that matches that face. It is basically a 1xN comparison. This system is composed of two parts: hardware part and software part. The hardware part consists of a camera, while the software part consists of face-detection and face-recognition algorithms software. When a person enters to the zone in question, a series of snapshots are taken by the camera and sent to the software to be analyzed and compared with an existing database of trusted people. A mail goes off if the user is not recognized. Experimental results demonstrate the effectiveness of proposed security system in order to restrict the unauthorized access and enhanced reliability by use of face recognition.

HARVEST CROP YIELD PREDICTION USING DATA ANALYTICS WITH MACHINE LEARNING METHOD

Submitted by

P.JEGADEESWARI
Reg No: 2019PCS03

A Project Report Submitted to

SRI SARADA COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to Manomaniam Sundaranar University, Tirunelveli - 627012)
Institution recognized u/s 2(f) and 12(B) of UGC
Reaccredited with "A" grade by NAAC
(A branch of Sri Ramakrishna Tapovanam, Tirupparaithurai)

In partial fulfillment of the requirements for the
Award of the degree of

MASTER OF COMPUTER SCIENCE
2019-2021

Guided by
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CERTIFICATE

This is to certify that the project entitled "HARVEST CROP YIELD PREDICTION USING DATA ANALYTICS WITH MACHINE LEARNING METHOD" is a bonafide work done by **Selvi P.JEGADEESWARI, Reg.No:2019PCS03** of **SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011,** in partial fulfillment of the requirements for the award of the degree of **MASTER OF COMPUTER SCIENCE** during the year 2020-2021.

HEAD OF THE DEPARTMENT

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INTERNAL GUIDE

M. Malarmathi
PRINCIPAL 20/4/2021
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TIRUNELVELI - 627 011

Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI on ___9.7.2021___

Place: Tirunelveli

Date: 9.7.2021

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2.

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DECLARATION

I hereby declare that the project work done for the award of the degree of "MASTER OF COMPUTER SCIENCE" on "HARVEST CROP YIELD PEDICTION USING DATA ANALYTICS WITH MACHINE LEARNING METHOD" is my original work carried out under the guidance of (Smt). B.PARVATHI DEVI, M.C.A., M.Phil., Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

STATION: TIRUNELVELI

DATE: 22.04.2021

P. Jegadeeswari

CANDIDATE

(P.JEGADEESWARI)

1. SYNOPSIS

In the era of internet and technology agriculture field of study requires attention in order to equip the farmers to maximize their output. In our country agriculture is the strength of the economy and growth and more than half of the population is living on the agriculture output. The crop yield is the major factor to decide the farmers earning and governments planning to meet the requirements to ensure the food security. Crop yield prediction will assist the farmers and other stakeholders for better crop planning i.e. selling, warehousing, market prices etc. Machine learning is one such technique employed to predict crop yield in agriculture. Various machine learning techniques such as prediction, classification, regression and clustering are utilizing to predict crop yield. There are various researchers working on this area and proposed several techniques to attain the accuracy for crop yield, but the utmost accuracy and error free information is still need the enhancement to extract data from the bigger data sets. An approach has been proposed for prediction of crop yield using machine learning technique. For the prediction, classification techniques like AdaBoost algorithm, XGBoost algorithm , StochasticGradientDescent algorithm will help the farmers to cut the losses, farmer suicides and also will improve the crop yield. This paper discusses and compares the various data analytics techniques available for the crop yield prediction. However, the selection of the appropriate algorithm from the pool of available algorithms imposes challenge to the researchers with respect to the chosen crop. The accuracy of training model should be higher and error rate should be minimum.

Crop yield is the field which plays an important role in improving our countries economy. Agriculture is the one which gave birth to civilization. India is an agrarian country and its economy largely based upon crop productivity. Hence we can say that agriculture can be backbone of all business in our country. Selecting of every crop is very important in the agriculture planning. The selection of crops will depend upon the different parameters such as marketprice, production rate and the different government policies. Many changes are reuired in the agriculture field to improve changes in our india economy. We can improve agriculture by using machine learning techniques which are applied easily on farming sector. Along with all advances in the machines and technologies used in farming, useful and accurate information about different matters also plays a significant role in it. The concept of implement the crop selection method so that this method helps in solving many agriculture and farmers problems. This improves our Indian economy by maximizing the yield rate of crop production.

IMAGE PROCESSING AND DATA MINING MONITORING IN PREDICTING THE DISEASE OF LEAF USING DEEP LEARNING

Submitted by

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This is to certify that the project entitled "IMAGE PROCESSING AND DATA MINING MONITORING IN PREDICTING THE DISEASE OF LEAF USING DEEP LEARNING" is a bonafide work done by Selvi E.SUBA LAKSHMI , Reg.No:2019PCS14 of SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI - 627 011, in partial fulfillment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE during the year 2020-2021.

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Place: Tirunelveli

Date: 9.7.2021

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1. R. ___ 9/7/2021

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DECLARATION

I hereby declare that the project work done for the award of the degree of "MASTER OF COMPUTER SCIENCE" on "IMAGE PROCESSING AND DATA MINING MONITORING IN PREDICTING THE DISEASE OF LEAF USING DEEP LEARNING" is my original work carried out under the guidance of **Smt. M.VIJAYALAKSHMI, M.Sc., M.Phil., SET.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date : 22.04.2021

E. Suba Lakshmi.
CANDIDATE

(SUBA LAKSHMI.E)

SYNOPSIS

India is fast developing country and agriculture is the back bone for the countries development in the early stages. Now a day's technology plays vital role in all the fields but till today we are using some old methodologies in agriculture. Identifying plant disease wrongly leads to huge loss of yield, time, money and quality of product. Identification of plant disease is very difficult in agriculture field. Leaf disease detection requires huge amount of work, knowledge in the plant diseases, and also require the more processing time. The objective of this research is to make use of significant features and prediction is done using computer vision technique. This method mainly download the image from the server then it converts the image into a grayscale by calculating its pixels and it shows out only the defected parts of the leaf.

First we need to select the plant which is affected by the disease and then collect the leaf of the plant and take a snapshot of leaf and load the leaf image into the system. It means representation of the image in more meaningful and easy to analyze way. In segmentation, a digital image is partitioned into multiple segments can defined as super-pixels. The main objective of this project is to find out whether the leaf is defected or not. If the leaf is in green color, then there is no defect in the leaf . if the leaf is spotted with black dots then it is shown to be affected by some disease and then we are predicting the disease of leaf and its lifetime is also too low.

This approach can significantly support an accurate detection of leaf disease. We can extend this approach by using image processing technique. It displays the output in graphical view that is X and Y coordinates. The user can also view the output in mobile application by retrieving the result from the server.

Developing countries like economy is mainly depends on agriculture. Due to plant diseases the quality and quantity of agriculture India the product is reduced. Some of the plant disease do not have visibility during early stage it only appears at that final stage. The purpose of agriculture is not only to feed ever growing population but it is an important source of energy and a solution to solve the problem of global warming.

Plant disease diagnose is very important in earlier stage in order to cure and control the disease. In this method experts are involved who have the ability to detect the changes in leaf color. Many times different experts identify the same disease as the different disease. This method requires continuous monitoring of experts. Depending on the applications, many systems have been proposed to solve or at least to reduce the problems, by making use of image processing we are also some of the automatic classification tool. Using this technique, we can easily segment the plant disease and also the affected part of the leaf can be found.   Python is a general-purpose interpreted, interactive, object-oriented, and high-level programming language. It was created by Guido van Rossum during 1985- 1990. Like Perl, Python source code is also available under the GNU General Public License (GPL). This tutorial gives enough understanding on Python programming language. Python is a high-level, interpreted, interactive and object-oriented scripting language. Python is designed to be highly readable. It uses English keywords frequently where as other languages use punctuation, and it has fewer syntactical constructions than other languages.

Python is Interpreted − Python is processed at runtime by the interpreter. You do not need to compile your program before executing it. This is similar to PERL and PHP. Python is Interactive − You can actually sit at a Python prompt and interact with the interpreter directly to write your programs. Python is Object-Oriented − Python supports Object-Oriented style or technique of programming that encapsulates code within objects.

Experiences with and in a Smart Campus for Optimizing Classroom Usage

Submitted by

S. NEELA
Reg No: 2019PCS06

A Project Report Submitted to
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(AUTONOMOUS)
(Affiliated to Manomaniam Sundaranar University, Tirunelveli - 627012)
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Reaccredited with "A" grade by NAAC
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In partial fulfillment of the requirements for the
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MASTER OF COMPUTER SCIENCE
2019-2021

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This is to certify that the project entitled **"Experiences with and in a Smart Campus for Optimizing Classroom Usage"** is a bonafide work done by Selvi S.NEELA, Reg.No:2019PCS06 of **SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI-627 011**, in partial fulfillment of the requirements for the award of the degree of **MASTER OF COMPUTER SCIENCE** during the year 2020-2021.

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09 . 07 . 21

Place: Tirunelveli

Date: 09. 07. 21

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1. R. *signature* 9/7/21
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DECLARATION

I hereby declare that the project work done for the award of the degree of **"MASTER OF COMPUTER SCIENCE"** on **"Experiences with and in a Smart Campus for Optimizing Classroom Usage"** is my original work carried out under the guidance of **(Smt).B.PARVATHI DEVI,M.C.A.,M.Phil.,** Sri Sarada College for Women (Autonomous), Tirunelveli-627011, Tamilnadu, India. The data and reports are true and correct to the best of my knowledge.

Station: Tirunelveli

Date: 22.04.2021

CANDIDATE

(S.NEELA)

1.SYNOPSIS

Experiences with and in a Smart Campus for Optimizing Classroom Usage

The project is aimed at developing an android application for the benefit of student and parents in between the management. This application allows the faculties to update the student profile and marks, attendance details of the students. When his attendance comes to less than 50% .it can be automatically send the alert message to that particular person and parent's mobile number. This detail can be viewed by the student and his/her parents with his/her unique register number. Also the students can be notified, when the students make themselves absent with their current attendance percentage. The staff will be able to view their details for which they can login using their staff id and password. Also, the staff will be able to enter the attendance of the students. The proposed system integrates all the above features into one pocket app which is not available in any of the existing systems. Android application student Result Analysis system is used for conducting the exams, analyzing the answers, calculate the grade and displaying the results. This system the students and the faculty to have an easy access for viewing the marks and attendance. The students can only view the marks if their student's authentications are correct. They do not have the permission to change or update the marks. All the process is done efficiently. This project mark analysis system using Android deals with the complete academic details of the Student include our parent mobile number. It comprises of the student Name, Roll no, Marks Obtained, Total, Average, Attendance Percent, Feedback. It can be accessed by the faculty who alone can change or update the marks of the students. Staff updates the mark, attendance details in staff module. Students can view their attendance percentage in the attendance module. Students can view the attendance details module. Students can view their marks in the view marks module. The student's record like attendance, marks, auto calculation and report generation can be performed with the help of this.

1

Student attendance system is the system of tacking the attendance of the student on basis of presence in class. Successful industries, schools, universities begin by engaging students and making sure that they will come regularly so the attendance rate become very important. In this paper, a smart student attendance system is designed and implemented based on android operating system. In compression with other traditional attendance systems, the proposed system provides faster, cheaper and reachable system for online student attendance and generate the attendance report automatically.

Experiences with and in a Smart Campus for Optimizing Classroom Usage

Submitted by

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Reg No: 2019PCS06

A Project Report Submitted to
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CERTIFICATE

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Submitted for Viva-Voce examination held at SRI SARADA COLLEGE FOR WOMEN(AUTONOMOUS), TIRUNELVELI on

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Place: Tirunelveli

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DECLARATION

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Station: Tirunelveli

Date: 22.04.2021

CANDIDATE

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1.SYNOPSIS

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STOCHASTIC MODEL FOR DETECTING THE BOUNDARY OF THE FEATURES IN REAL TIME

A project work report submitted to the
Department of Computer Applications
in partial fulfilment of the requirements for the award of the degree of
MASTER OF COMPUTER APPLICATIONS

Submitted in December 2021 by

P. PRIYA - 2020PCA10

Under the Guidance of

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This is to certify that this project work titled **'STOCHASTIC MODEL FOR DETECTING THE BOUNDARY OF THE FEATURES IN REAL TIME'** is a bonafide work of P. PRIYA of final year MCA, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF COMPUTER APPLICATIONS** during the academic year 2021 – 22.

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P. Logambal.

EXTERNAL EXAMINER

DECLARATION

I do hereby declare that this project work titled "**STOCHASTIC MODEL FOR DETECTING THE BOUNDARY OF THE FEATURES IN REAL TIME**" was carried out by myself for the award of the degree of **MASTER OF COMPUTER APPLICATIONS** is my original work.

P. Priya

(P. PRIYA)

P. Logambal.

Signature of the Internal Guide

ABSTRACT

In this study, the boundary of object is detected using the preprocessed methods. There are so many software's like Adobe Fresco, Astro pad, Adobe Photoshop sketch which can be used to work as a preprocessed way to detect the boundary. The boundaries of the image were detected using a live cam method. The Canny Edge Algorithm is used in this study which is best and most effective method. In this study, cvt color, Gaussian blur, Threshold techniques are used to remove the noise in the images that are taken real time. These techniques are used in a preprocessing method. Edge Detection is nothing but it is for finding the boundaries of objects within images. It is mainly used for image segmentation and data extraction. The Real Time Edge Detection consist of the TMS320DM6437 DSP (Digital Signal Processor) and Canny Edge Detection algorithm. The Edge Detection in computer vision will give meaningful information about the images and the main goal of this application is to give thin edges and the location of object or image in exact shape and size. However, the manual sketching will draw boundaries of the particular images, whereas in this study the web cam will show the edges which the web cam identified. Here the edges are calculated in a live method in a easy way. Drawing is achieved by tracking the real time environment and display the edges and boundaries. The goal of this work is to accurately detect and localize boundaries in natural scenes. The boundaries of images were detected using a live cam method. The live cam program starts by calculating all gradient direction and draws the boundary of the object. It works in two-dimension method, according with its x, y position. Drawing or Sketching using hand takes more time. Using this techniques time is saved and reduces the man power. It can be used in all fields for structural design. The result is automatic detection of the outline of the object or image or humans. When edge detection was performed on the original real time image of 276KB using Canny edge detection algorithm, edge size detected was 22,7 KB. This is considerably more accurate and faster compared to manual sketching by untrained users and have a time management. Finally compare with the man power and computer vision. The Computer Vision by the edge detection is best to identify the boundaries of the image or object.

MODEL FOR DETECTING ANNOYMOUS INFORMATON FROM E-NEWS PAPER USING MACHINE LEARNING ALGORITHM

A project work report submitted to the
Department of Computer Applications
in partial fulfilment of the requirements for the award of the degree of
MASTER OF COMPUTER APPLICATIONS

HAND · HEART · HEAD

Submitted in December 2021 by

S.HARI PRIYA - 2020PCA03

Under the Guidance of

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Institution recognized u/s 2(f) and 12(B) of UGC & Re- accredited with 'A' Grade by NAAC
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CERTIFICATE

This is to certify that this project work titled 'MODEL FOR DETECTING ANNOYMOUS INFORMATON FROM E-NEWS PAPER USING MACHINE LEARNING ALGORITHM' is a bonafide work of S. HARI PRIYA of final year MCA, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF COMPUTER APPLICATIONS** during the academic year 2021 - 22.

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[Dr. M. Malini]

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21/1/2022

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DECLARATION

I do hereby declare that this project work titled **"MODEL FOR DETECTING ANNOYMOUS INFORMATON FROM E-NEWS PAPER USING MACHINE LEARNING ALGORITHM"** was carried out by myself for the award of the degree of **MASTER OF COMPUTER APPLICATIONS** is my original work.

S.Hari Priya

(S.HARI PRIYA)

S.Dhiya Bhavani

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ABSTARCT

The study of research was the detection of anonymous information in the newspaper. The anonymous information's has been spreading through the medias such as Facebook, Instagram. In this study anonymous of information was detected from the newspaper in this newspaper. The proposed method of this study is passive aggressive to detect false information from newspaper. The input of the study is data.csv which are collected from news website. The model of passive aggressive classifier has been developed in python. With the help of classifier, there are 50 anonymous news found in this result among the 5000 news contents. Thus, the result proves that accuracy of model is 95%

FACE MASK RECOGNITION USING DEEP LEARNING

A project work report submitted to the
Department of Computer Applications
in partial fulfilment of the requirements for the award of the degree of
MASTER OF COMPUTER APPLICATIONS

Submitted in December 2021 by

K. RATHNA - 2020PCA11

Under the Guidance of

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K. Rathna

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ABSTRACT:

In this study of COVID-19 pandemic, the World Health Organization (WHO) declared the use of face mask as a mandatory biosafety measure. This current facial recognition system, motivating the development of this study. This study described the development of the system for recognizing people, whether the face mask is wearing or not from the video stream in real time. The proposed algorithm in this model is convolutional neural network (CNN) which comes under the category of supervised learning algorithm in deep learning. This model was based on the MobileNetV2 architecture. The input taken in this model is static and live video stream. This model is used to detect the presence of a face mask on human faces on live video stream. This study is developed by using deep learning to develop the face detector model. The architecture used for the object detection is Single Shot Detector (SSD) because of its good performance, accuracy and high speed. Alongside this, the transfer learning in neural networks was used to produce the final output that is the presence or absence of a face mask in the live video stream. This model proposes a method to detect the level of face mask weared using the bounding box with labelling. This model can be implemented in offices, school and colleges, hospital and railway station etc. This model shows the experimental results in two ways which are either positive or negative, this model shows the high accuracy of 98.65%. This model produces the accuracy depends on the level of the face mask was weared. This model can be applied in various area like airports, malls and other crowded places as a preventive measure.

RECOGNITION OF FACE TO IDENTIFY THE AGE AND GENDER OF PERSON FROM THE IMAGE USING CONVOLUTIONAL NEURAL NETWORK ALGORITHM

A project work report submitted to the
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in partial fulfillment of the requirements for the award of the degree of
MASTER OF COMPUTER APPLICATIONS

HAND - HEART - HEAD

Submitted in December 2021 by

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M. Maheshwari

(M.MAHESHWARI)

S. Vimala

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ABSTRACT

In this study, age and gender classification that recognition the face to detect the age and gender. The age and gender of the person from the input image \video. It plays in the main role in the department of police to identify. The criminal and security pupose.There are used to previous research for support vector machines (SVMs), K means algorithm, Active Appearance Model (AAM), Spatially Flexible Patches (SFP), Local Binary Patterns (LBP).The proposed method of this study is Convolutional neural network algorithm. It's most suitable for recognition of face. The input of Convolutional neural network algorithm for image or video of the person. This used to supervised learning Based on the recognition of feature of skin different between the male and female can be prominently attributes to factors are skin color, hair existence of beards and thinness of eyebrows it's for gender identityfication.the number and size of wrinkles and dark spot on faces increase as a person's ages. This the gender of the person have been recognized occurred the persons features of skin hair and also age the identify hand on the software for declaration age and gender this is developed in python. The output of identify the group of persons male and female in specify age group.

2

REAL TIME PREDICTION OF HEART DISEASE USING

RANDOM FOREST CLASSIFIER

A project work report submitted to the
Department of Computer Applications
in partial fulfilment of the requirements for the award of the degree of
MASTER OF COMPUTER APPLICATIONS

Submitted in June 2022 by

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This is to certify that this project work titled 'REAL TIME PREDICTION OF HEART DISEASE USING RANDOM FOREST CLASSIFIER' is a bonafide work of P. PRIYA of final year MCA, Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of MASTER OF COMPUTER APPLICATIONS during the academic year 2021 - 22.

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I do hereby declare that this project work titled "**REAL TIME PREDICTION OF HEART DISEASE USING RANDOM FOREST CLASSIFIER**" was carried out by myself for the award of the degree of **MASTER OF COMPUTER APPLICATIONS** is my original work.

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ABSTRACT

In this study, the title of the project is to predict the heart disease in real time. Health disease are increasing day by day due to lifestyle, hereditary. Especially, heart disease has become more common these days, the life of people is at risk. Each individual has different values for Blood pressure, cholesterol and pulse rate. This study gives the survey about different classification techniques implemented for predicting the risk level of each person based on age, gender, Blood pressure, cholesterol, pulse rate. Early detection of such disease is an important task for many health care providers. They help their patients prevent such disease and save lives. Heart disease is recognized as one of the leading causes of death world wide. Here, only a subset of the 14 attributes is used to predict the heart disease. In many fields such as business application, stock market analysis, e-commerce, medical sector and many more. Random forest algorithm gives many advantages to the medical field due to time consumption and quick result. The proposed method of this study is random forest classifier algorithm to predict the heart disease. The training data for this proposed method is collected from the Kaggle website to predict the heart disease in real time. The input data for this proposed method is given in real time. This proposed method can be used for both classification and regression problem in machine learning. It is mostly suitable for predictive accuracy of the data. The predictions are made using the classification model that is built from the classification algorithms when the heart disease dataset is used for training and is to present a comparative examination of various machine learning models in order to arrive at the best decision for predicting the heart disease with greater accuracy than previous methods. Random forest algorithm is very suitable for the medical field to identify the disease. It gives 80% result for the prediction of heart disease.

IDENTIFICATION OF CROPS LEAVES DISEASE USING DEEP LEARNING MODEL

A project work report submitted to the

Department of Computer Applications

in partial fulfilment of the requirements for the award of the degree of

MASTER OF COMPUTER APPLICATIONS

HAND - HEART - HEAD

Submitted in June 2022

by

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Under the Guidance of

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This is to certify that this project work titled "IDENTIFICATION OF CROPS LEAVES DISEASE USING DEEP LEARNING MODEL" is a bonafide work of S.HARI PRIYA of final year MCA,SRI SARADA COLLEGE FOR WOMEN(Autonomous), Tirunelveli– 627011 in partial fulfilment of the requirements for the award of degree of MASTER OF COMPUTER APPLICATIONS during the academic year 2021 - 22.

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DECLARATION

I do hereby declare that this project work titled **"IDENTIFICATION OF CROPS LEAVES DISEASE USING DEEP LEARNING MODEL"** was carried out by myself for the award of the degree of **MASTER OF COMPUTER APPLICATIONS** is my original work.

S. Hari Priya

(S.HARI PRIYA)

M. Sudarlemi

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ABSTRACT

This project plays a vital role on recognizing the crops leaves image and finding out the diseases associated with the same. Due to space constraints, people prefer terrace garden, instead of growing in conventional methods. This application is very much useful for terrace garden in Metro cities and normal cities. This model is developed with client and server architecture. Client implemented software using HTML and database developed is developed in MySQL. Plant leaf images, session activities are stored in database. The person uploads the image of affected leaf. Training data are collected from agriculture websites. Testing data are collected from nearby places. The software compares the uploaded leaf's image with predefined data and identifies the type of disease with which it is affected. Growth of a plant may be mainly affected by deficiency in the soil and insect bites. Soil deficiency: Soil sample is collected from terrace garden / our native place and will be sent for analysis. Analysis report is taken from office of Joint Director – Agriculture office. The parameters in the report are fed on the database and proper natural compost will be suggested for that soil, to increase the productivity. Insect bites Analyzed image of the leaf is used to determine the insect bites and natural remedies will be suggested to avoid the same in future. Leaf diseases are identified using Convolution Neural Network model (CNN) in supervised learning algorithm. CNN algorithms are very suitable for image classification process. The input leaves data are collected from our terrace garden. Predefined data are collected from various agricultural websites. The application also uses weather report of any given location and uses the same for proper suggestion. The software is developed by python platform.

REAL TIME DETECTION OF DROWSINESS OF DRIVER USING CONVOLUTIONAL NEURAL NETWORK

A project work report submitted to the
Department of Computer Applications
in partial fulfilment of the requirements for the award of the degree of
MASTER OF COMPUTER APPLICATIONS

Submitted in June 2022 by

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CERTIFICATE

This is to certify that this project work titled 'REAL TIME DETECTION OF DROWSINESS OF DRIVER USING CONVOLUTIONAL NEURAL NETWORK' is a bonafide work of K. RATHNA of final year MCA., Sri Sarada College for Women (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of MASTER OF COMPUTER APPLICATIONS during the academic year 2021 - 2022.

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I do hereby declare that this project work titled "**REAL TIME DETECTION OF DROWSINESS OF DRIVER USING CONVOLUTIONAL NEURAL NETWORK**" was carried out by myself for the award of the degree of **MASTER OF COMPUTER APPLICATIONS** is my original work.

K. Rathna

(K. RATHNA)

T. Kotha Nagan
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REAL TIME DETECTION OF DROWSINESS OF DRIVER USING CONVOLUTIONAL NEURAL NETWORK

ABSTRACT

Drowsy driving is one of the common causes of road accidents resulting in injuries, even death, and significant economic losses to drivers, road users, families and society. The natural sleep cycle of driver has been disturbed. Due to lack of sleep and irregular sleep cycle, driver tend to feel drowsy at any time of the day. With these poor work-life timings, driver can find it difficult to carry out the activity like driving which will require a healthy and properly functioning state of mind and body. If the driver is warned in time, several tragedies can be prevented. It motivating the development of this study based on making a complete drowsiness detection system which works by analyzing driver's state of eyes to further deduce the drowsiness state of the driver and alert the driver before any serious hazard threat to road safety. It will continuously be monitoring the status of the driver is taken as video stream as input. This proposed model is developed by using (CNN) Convolutional neural network one of the supervised efficient algorithms. The drowsy model uses deep learning techniques with an adaptive deep neural network based on ResNet-Xception-71. The proposed method analyzes the video and detects driver's activities in every frame to find all the features automatically. The transfer learning technique is used to train the proposed networks on training dataset. The drowsy method using deep learning techniques can achieve a high accuracy of 96%. In this study is used to minimize road accidents and increase road traffic safety, reliable and precise driver drowsiness solutions are required.

REAL TIME IDENTIFICATION OF STRESS LEVEL OF HUMAN USING

MULI-TASK CONVOLUTIONAL NEURAL NETWORK

A project work report submitted to the

Department of Computer Applications

in partial fulfillment of the requirements for the award of the degree of

MASTER OF COMPUTER APPLICATIONS

HAND · HEART · HEAD

Submitted in June 2022

by

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This is to certify that this project work titled "**REAL TIME IDENTIFICATION OF STRESS LEVEL OF HUMAN USING MULI-TASK CONVOLUTIONAL NEURAL NETWORK**" is a bonafide work of Selvi **M. MAHESHWARI** of final year MCA, **SRI SARADA COLLEGE FOR WOMEN** (Autonomous), Tirunelveli – 627011 in partial fulfilment of the requirements for the award of degree of **MASTER OF COMPUTER APPLICATIONS** during the academic year 2021 - 22.

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M. Maheshwari

(M. MAHESHWARI)

S. Vimala

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ABSTRACT

The study is carried out to detecting level of stress from the people. The Stress detection application model plays main role to identify humans stress. Nowadays people are prepared the job mostly in the IT sectors formed time peoples wants to need the stochastic life. When the people deal stress can increase leads to many problems like depression, suicide, heart attack, and stroke.The generally the stress level of can be detected by measuring heart rate. The main goal of the model is to track a person's to detect page to reduce and give the ways reduce the stress which make more pleasure environment all works. This model preminary focus on stress reduction and health and flexible work atmospheres for them. There are so many methods implemented in previous research namely KNN algorithm, Viola-Jones Algorithm, Random Forest, Decision Tree, Ada-Boost, Linear Regression, Naïve Bayes and SVM. The proposed method of the study is Multi-Task Convolutional Neural Network (MTCNN) algorithm; it's most suitable for face recognition. The input of MTCNN algorithm is real time video stream of the person. This study is to provide the person stress level based on the face expression of the human. The stress level of the person can be detected based on the expression features from namely position of the eyebrow, nose by accessing mean position of the features from the image. This model accepted the input as video stream of the image and produced the classified images .In which access the angle and mean position of the features of the persons face. The model developed using the MTCNN it's one of the method of CNN algorithm in deep learning. This model can provide quick convenient and accurate result.