

## KG COLLEGE OF ARTS AND SCIENCE

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## **Criterion 3: Research, Innovation and Extension**

**Key Indicator 3.3: Research Publication and Awards** 

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

# **Screenshots of the Research Article**

**Year 2021-22** 



IMPACT FACTOR - 5.61

# LangLit

ISSN 2349-5189



An International Peer-Reviewed Open Access Journal

# DIASPORA AND IDENTITY CRISIS AUTHOR: CHITRA BANERJEE DIVAKARUNI

MRS. R.JEEJA

Assistant Professor Department of English KG College of Arts and Science Saravanampatti , Coimbatore

#### ABSTRACT:

Identity disaster or seek of identification has obtained a unique drive withinside the Post-Colonial literature. Man is referred to as a social animal which desires a few home, love of dad and mom and pals and relatives. But while he's unhoused, he loses the experience of belongingness and therefore suffers from a experience of lack of confidence or identification disaster. In the sphere of Indian English Literature, feminist or lady focused technique is the principal improvement that offers with the enjoy and state of affairs of girls from the feminist consciousness. There is a metamorphosis withinside the picture of girls characters within side the final 4 decades. Chitra Banerjee Divakaruni is taken into consideration as an eminent Indian Diasporic writer. Her novels deliver extra significance to the girls and the struggling they go through because of the cultural differences, alienation, identification disaster and so on. Hence Chitra Banerjee's novel "The Mistress of Spices" may be analysed the usage of the idea of Diaspora via her important man or woman Tilo.

Key words- Diaspora, Identity Crisis, Metamorphosis

## Introduction:

Diasporic writings supply upward thrust to the thinking of the definitions of 'home' and 'nation' Schizophrenia and/or nostalgia are frequently the predominant topics of those writers as they are trying to find to discover themselves in new cultures. The on-the-spot end result of diaspora writing is that it brings a clean attitude to English literature. It is a reexamination of Western culture, defined with the aid of using a person who's concurrently embedded and detached, and offers voice to a large phase of Western society this is too frequently marginalized and ignored. Some of the maximum distinguished Indian writers in English belong to the diaspora. V.S. Naipaul, Salman Rushdie, Amitav Ghosh, Jhumpa Lahiri and Shashi Tharoor are diaspora writers. Even Vikram Seth and Rohinton Mistry have become innovative once they commenced to stay abroad. In literature, the Indian diasporic writers had been pretty protecting the middle level due to the fact those writers, who stay outdoor their local usa nevertheless cherish a nostalgic connection to their local spirit and thought. Chitra Banerjee's The Mistress of Spices brings out the internal struggle of organising self-identification via the predominant person withinside the novel Tilo, and different characters named Geeta and Lalitha. Divakarumi's novel is likewise an exploration of personal

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06 April 2022

Website: www.langlit.org

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UGC Sponsored One Day Virtual International Conference on Diaspora: Literature, Culture and Identity organized by Shri Shivaji Arty & Commerce College, Amravati, Maharashtra State, India and Late Narayanrao Amrutrao Deshmukh Arty & Commerce College, Chandur Bazar, Amravati, Maharashtra State, India



IMPACT FACTOR - 5.61

# LangLit

ISSN 2349-5189



An International Peer-Reviewed Open Access Journal

## DIASPORA: LITERATURE, CULTURE AND IDENTITY (DIASPORA AND IDENTITY CRISIS)

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## ABSTRACT:

A Diaspora is a dispersed group of people whose origin is located in a different Geographical set-up. Diaspora refers to the mass dispersion of a population from its indigenous territories. The examples of such migration all over the world are stated. The necessity for such migration of diasporas, and how they struggled to get their Ethnic identity and Diaspora identity. The role of immigration, emigration and migration in Diaspora procedures, the types of diasporas, the effects of diaspora in the Economy of a nation and in the other spheres of life processes are analyzed. The various identity crisis the Diasporas undergo during the course, the mental stress they experience, the present day missions who tender a helping hand in promoting the Diasporas. Few examples from the literature, novels presented by famous feminine authors to prove the facts are dealt. Even though the Diasporan concept looks very much attractive and challenging, it also bring people into misery and suffering.

Key words: Diaspora, Ethnicity, Duel identity, Immigration, Emigration, Migration, Expression, Resistance, Culture, Heritage, Crisis, Identity crisis.

Diaspora is a term emerged from Greek origin. Which means dispersion or scattering. A Diaspora is a dispersed group of people whose origin is located in a different geographical set-up. If its historical background history is searched, the term Diaspora refers to the mass dispersion of a population from its indigenous territories. The word Diaspora tells about people who have their homeland not voluntarily but by the compulsion of huge powers. To other parts of the world all around. Many examples can be quoted from History. To quote a few notable, the shift of Jewish people from Jerusalem and Judea On 15th January 585 B C THE Babylonians came upon Jerusalem and besieged it. (Ezekiel :chapter 24.1.) Nebuchadnesar the ruler of Babylon took away all the elders, youths and people to Babylon as captives.(Jeremiah:chapter 27.19) Gods curse on His people for their disobedience and other sins against His given laws made them captives in the foreign land.(Jeremiah: chapter 7.2)totally 430 years the people of Israelites were in the foreign lands like Assyria, Babylon, Egypt and Rome as permitted by God. Psalm 137 pictures how Israelites sat along the banks of the river in the foreign country and cried for their nation Zion. The Babylonians asked

Special Issue

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06 April 2022

Website: www.langlit.org Contact No.: +919890290602
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IMPACT FACTOR - 5.61

# LangLit

ISSN 2349-5189



An International Peer-Reviewed Open Access Journal

#### SENSE OF ANTAGONISM IN THE TIGER'S DAUGHTER BY BHARATHI MUKHERJEE

#### DR. RAJITHA KUMARAN

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#### ABSTRACT

This paper prods into issues that spring because of cross cultural setting. Diasporic writing has gained momentum because of writers like Bharati Mukherjee, Meena Alexander, JumphaLahiri and Kiran Desai. Returning to "homeland" and living amidst loved ones is always a dream of expatriates. However years of estrangement and inevitable changes everywhere keep them conscious and search for identity even in their motherland. They lose their solidarity and harmony with their own parent society. The protagonists of Bharati Mukherjee, one of the prominent post-colonial writer, especially women reveal the deracinated consciousness and fragmented individuals, striving to invigorate their identity through reliving in nostalgia. It probes into alienation that occurs in the characters as a result of rootlessness. It can be considered an autobiographical theme on migration as Mukherjee herself has experienced much of what she has mentioned in the novel. As one of her initial works in her literary career she tries to express the immigrant's feelings to bridge the breech between the Eastern and Western part of the world, that are poles apart in terms of culture, ideals and tradition.

Key words: Expatriate, Estrangement, Deracination, Alienation and Nostalgia.

The perspective of women, especially in Indian fiction writing, has seen a vast change in the past few years which occurred with the mass exodus towards the Western world. The writers have seen writing as a vent for their feelings where they expose fragmented identities because of language and culture. The diasporic writes have raised their voice to show how such timid, diffident girls of the Indian Society break all stereotypes to emerge assertive and independent, creating a niche of their own both in family and in the society.

The term Diaspora sprung from the Greek word diaspeiro meaning "to scatter" or "to sow over". Diaspora most often is because of an unwilling shift as a result of war, economic downfall of a country, natural disaster or even a mode of escapism. However most of the times it is temporary with the immigrants longing and trying to get back to their homeland someday. This study examines the work of Bharati Mukherjee's The Tiger's Daughter, published in 1971. Mukherjee was born in Calcutta, West Bengal. She moved to the US for her postgraduate studies. She has spent 10 years of her life living in Canada, in Toronto and Montreal

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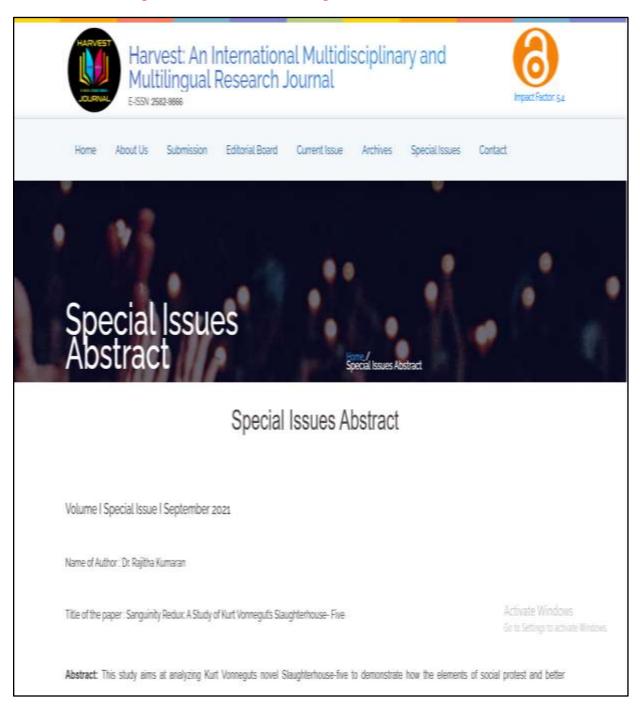
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06 April 2022

Website: www.langlit.org

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UGC Sponsored One Day Virtual International Conference on Diaspora: Literature, Culture and Identity organized by Shri Shivaji Arty & Commerce College; Amravati, Maharashtra State, India and Late Narayanrao Amrutrao Deshmukh Arty & Commerce College, Chandur Bazar, Amravati, Maharashtra State, India





IMPACT FACTOR - 5.61

LangLit

ISSN 2349-5189



An International Peer-Reviewed Open Access Journal

## THE IMPACT OF ALIENATION AND DISPLACEMENT: THE VACILLATION OF MIND IN ASHIMA GANGULI AND GOGOL GANGULI IN JHUMPA LAHIRI'S THE NAMESAKE

#### V.VANITHA JEYAKUMARI

B.Sc, M.A, M.C.A, M.Phil, B.Ed., B.A., M.A., Assistant Professor KG College of Arts and Science Coimbatore.

#### ABSTRACT

This paper throws light on the mind oscillation of Ashima Ganguli and Gogol Ganguli between America and India in Jhumpa Lahiri's The Namesake. Their life, their mind, is a passage from India to America and vice versa. Ashima Ganguli is the woman who, in this novel, is a Bengali and married Ashoke Ganguli, who is living in the US. She finds it very difficult to live without thinking about her homeland. She goes with Ashoke to the US because of the bond of marriage or love with her huzband. In his presence, she is happy and not thinking about his home country. The culture of one country differs from that of another. One who migrates to another country should prepare their mind and heart to accept that country's culture and should be ready to adjust to their environment. Sometimes Ashima feels much for her homeland and family. Sometimes she enjoys the American lifestyle. She goes to and fro from America to India and from India to America in her mind (thought). Similarly, her son, Gogol (Nikhil) Ganguli, also relates his name to his homeland. He wants to change his name according to the US style. Later, he comes to understand the importance of his name and changes his mind, keeping the same name. He often thinks about his father's life in Bengal and what his father often tells him has rooted in his mind and that connects him with his homeland. He, too, goes to and fro in his life and feels a type of displacement.

KEYWORDS: Alienation, Displacement, Homesick, Journey, Life, Love, To and Fro, Train, Vacillation.

#### Introduction:

Jhumpa Lahiri's first novel was The Namesake. It was published in 2003. She was praised for her portrayal of immigrants and their issues of cultural and generational gaps. Gogol Ganguli is a young man and the main character in the novel, has a mental vacillation between his parents' traditional Indian roots and his own American identity. A psychological study can be used to investigate Gogol Ganguli's mental states in some of his beliefs and thoughts about his life events. Ashima Ganguli is the mother of Gogol Ganguli. Ashoke Ganguli is his father. Their family is an immigrant Indian American family, and so their life journey is the passage

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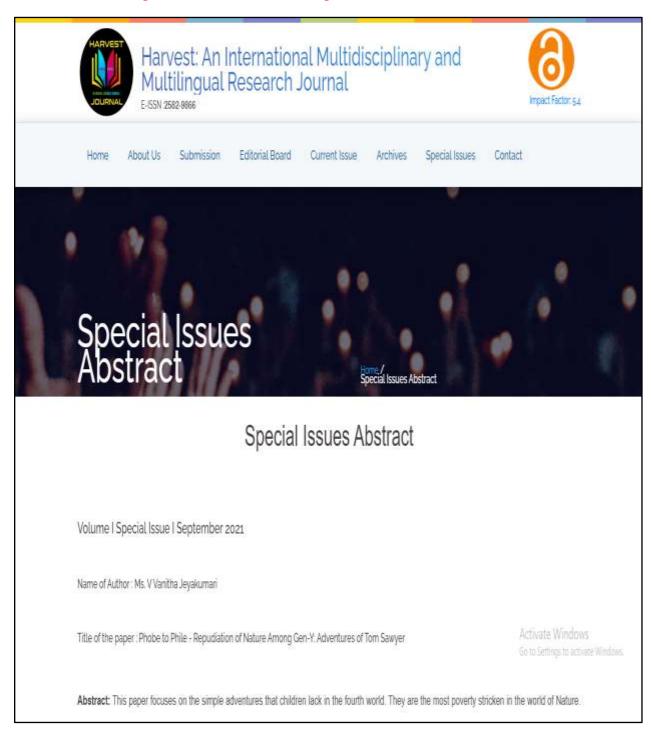
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06 April 2022

Website: www.langlit.org

Contact No.: +919890290602

UGC Spensored One Day Virtual International Conference on Diasporar Literature, Culture and Identity organized by Shri Shivaji Arts & Commerce College, Amravati, Maharashtra State, India and Late Narayanrao Amrutrao Deshmushh Arts & Commerce College, Chandur Bagar, Amravati, Maharashtra State, India



## 3.3.1 / Research Papers Published / Data Template / Row No. 12

## Criterion 3 – Research. **Innovation and Extension**

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years



## Sufferings and Starvation in Kamala Markandaya's Nectar in a Sieve

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#### OPEN ACCESS

Manuscript ID: ENG-2021-09033992

Volume: 9

Issue: 3

Month: June

Year 2021

P-ISSN: 2320-2645

E-ISSN: 2582-3531

Received: 08.04.2021

Accepted: 16.05.2021

Published: 01 06 2021

## Citation:

Malathi, VP, "Sufferings and Starvation in Kamala Markandaya's Nector in a Journal of English, vol. 9, no. 3, 2021, pp. 70-73.

https://doi.org/10.34293/ english.v9i3.3992



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#### Abstract

Kamala Markandaya is one of the best known contemporary Indian novelists. Her novels are remarkable for their range of experience. Her first novel Nector in a Sieve is set in a village and it examines the hard agricultural life of the south Indian village where industry and modern technology played havoc. Kamala Markandaya occupies a very important position among the women novelist who have made substantial contribution to Indian fiction after the Second World War, Markandaya had not always itsed abroad. She was born as Kamala Purnaiya in 1924 in Mysore and she was also a journalist. At some point, she decided to spend 18 months in a village out of curiosity". This inspired the setting of her first novel, centred on Rubmani and her husband" Nathan. Nector in a Sieve is remarkable for its portrayal of rustics who live in fear, hunger and despair. It is of the dark future, fear of the sharpness of hunger, fear of blackness of death. Almost all the characters in this novel lead miserable life and most of them fail to survive. There are at least a couple of them who were not successfully struggle and have the concept of survival. This novel tells the story of landless peasants of India who face starvation, oppression, breakup of family, home and death. Fet they retain their compassion, love, the strength to face their life and take delight in the little pleasures of the daily existence.

Keywords: Rustics, Hunger and despair, Blackness of death, Survival

#### Introduction

Kamala Markandaya was a pseudonym used by Kamala Pumaiya Taylor, an Indian novelist and journalist. A native of Mysore, India, Markandaya was a graduate of Madras University, and afterwards published several short stories in Indian newspapers. After India declared its independence, Markandaya moved to Britain, though she still labelled herself an Indian expatriate long afterwards. Known for writing about culture clash between Indian urban and rural societies, Markandaya's first published novel, Nectar in a Sieve, was a bestseller and cited as an American Library Association Notable Book in Sieve." Shanlax International 1955. Her other novels include Some Inner Fury (1955), A Silence of Desire (1960), Possession (1963), A Handful of Rice (1966), The Nowhere Man (1972), Two Virgins (1973), The Golden Honeycomb (1977), and Pleasure City (1982/1983).

## Sufferings and Starvation in Nector in a Sieve

Rukmani dreamt of a grand wedding which when materialised was anything other than grand. She was married to poor tenant farmer, Nathan who did not even own the land he titled. Rukmani's marriage is very vividly described by the novelist. The contrast become sharper when his condition is compared to that of her father who owned his own land but the situation was not all bad:

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## Criterion 3 – Research, Innovation and Extension

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

E-ISSN: 2456-5571

Vol. 6 Special Issue 3 October 2021

## THE SOCIAL STRUCTURE AND GLOBALIZATION IN ARUNTHATHI ROY'S THE GOD OF SMALL THINGS

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#### Abstract

Suzanna Arundhati Roy is an Indian author known for her novel The God of Small Things (1997), won the Man Booker Prize for Fiction in 1997 and she is a non-expatriate Indian author. She is also a political activist involved in human rights and environmental causes. Globalization and imperialism are themes; we cannot be taken it separately when speaking about India's history. Roy's book says the impact of society and its people in India. The God of Small Things is a semi-autobiographical book which includes the author's political beliefs and understanding how India has been shaped and is still shaped by globalism and colonialist policies. The theme deals with India's economy, India's role and the novels own position within the global market of literature, the Indian Diaspora, why caste and colonialist ideas still have major effecton the construction of identity in times of globalization.

### Introduction

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The God of Small Things is considered as Indian writer Arundhati Roy's one of the best novel. It is a story about the childhood experiences of fraternal twins whose lives are destroyed by the "Love Laws". The book explores how the small things affect people's behaviour and their lives. The God of Small Things was Roy's first book and only novel until the 2017 publication of The Ministry of Utmost Happiness twenty years later. She starts writing the manuscript for The God of Small Things in 1992 and completed four years later, in 1996 and was published in the following year. The story was first recognized by Pankaj Mishra, an editor with HarperCollins, who made effort of publishing and sent it to three British publishers. Roy received £500,000 in advance and rights to the book were sold in 21 countries. In 2013, Talkhiyaan, a Pakistani television series based on this novel, was aired on Express Entertainment.

## Globalization in Roy's The God of Small Things

In The God of Small Things, Roy foreshadows the private love relationships, actually socially and politically connected. It is recalling the natural uncontrollability of who to love, in what way, and to what extent of love relationships. Romantic, sexual and familial love relationships amalgamated in The God of Small Things but in many ways it is perverted, and destroyed by social politics. These social politics include the novels primary focus on caste and religion, as well as politics and working the surface, such as gender. In the novel, social politics are often controlled the family, even touch to their own ego, and ultimately expose the violence of reciprocal state and family policing structures. Because the agent for these social politics is the family itself, we can trace these unnatural

While explaining the influence that caste and religion that were related to dictating the personal relationships of the characters in The God of Small Things, gender is intertwined, though central, context. Gender plays a vital role

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ISSN 2349-5189



An International Peer Reviewed Open Access Journal

# A STUDY ON DIASPORIC LITERATURE: "HOMELAND" AND "OTHERNESS" IN THE LOST DAUGHTER OF HAPPINESS BY GELING YAN

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Department Of English,
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#### ABSTRACT:

The phrase diaspora comes from the Greek phrase 'diaspeiro' meaning to scatter about''. It is a standing wherein a diasporic is residing in a overseas land far from the area of his or her origin. The time period additionally refers back to the contributors of ethnic organization who've willingly or forcefully left their local land. The phrase diaspora become first utilized in 586 B.C. through Babylonians to cope with the exile of Jews from Judea. The time period become first added in English language in 1876 through Protestants. The twentieth century witnessed significant migration throughout the maximum elements of the sector for religion, education, employment or so on. The time period diaspora has won recognition from the Nineteen Sixties onwards. Phil Cohen opines 'diaspora is one of the buzzwords of the postmodern age. It has the distinctive feature of sounding extraordinary while rolling sibilantly off the English tongue, it whispers the promise of hidden depths of meaning, but assimilates them to the form of a wave breaking lightly on local shores' Earning cash and levels have now no longer remained the best motives for migration, as people had been accepting migration for gaining fame symbol, financial and social security, higher prospects, to flourish abilities and so on.

## Keywords: Homeland, Otherness, Diaspora, Dislocation

This thesis examines the transformation of "homeland" and "otherness" as nicely as the connection among every different in The Lost Daughter of Happiness. I start via way of means of exploring how the migration of Chinese to the US is depicted as an countless trajectory withinside the tale via a historic engagement and a communicate among generations. From there, I plan to factor out that the tale complicates the which means of diaspora because it can't handiest constitute a spatial dislocation, however additionally a temporal dislocation. Thus, I argue that it destabilizes the traditional ideology which refers "homeland" to a singular vicinity. Contrary to "settle land", the sooner conceptualization of "homeland" is translated via way of means of a few pupils right into a felicitous area of dwelling for migrants. Reading The Lost Daughter of Happiness, we are able to locate new dimensions and differences of home. The antique conceptualization of "homeland" is reversed now no longer as a novel vicinity, however rather as a manner of (be-)coming a felicitous area of dwelling for diasporic subjects: it isn't always a constant vicinity anymore.

Migration is a subject matter in The Lost Daughter of Happiness, a tale touching upon the existence of Chinese immigrant in addition to sexuality, race, identification and beyond. The word migration right here may be interpreted as a kind of geographical relocation, an

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06 April 2022

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UGC Spannered One Day Virtual International Conference on Disaporus Literature, Culture and Identity organized by Shri Shivaji Arts & Commerce College, Americani, Maharashtra State, India and Late Narayanrao Americano Deshenski Arts & Commerce College, Chandur Bagar, Americani, Haharashtra State, India.

Indexed: ICI, Google Scholar, Research Gate, Academia.edu, IBI, IIFC, DRJI, The CiteFactor, COSMOS

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## DIASPORA LITERATURE AND FORMULAIC CONCEPTION OF CONTEMPORARY ART IN AFRICA

#### JACOB SHAI M. SANTHOSH KUMAR

Assistant Professor, Department of English, Kg College of Arts and Science, Saravanampatti Coimbatore.

#### ABSTRACT:

One high-quality side of globalization is the fusion of innovative elements from diverse cultures of the global. The essence of this international shift has drastically modified the modern-day African artwork market, rendering publish cutting-edge representations of this top-notch continent, its humans and creatures in new and enlightening contexts. Modern African artists paintings to discover new principles through deciphering them inside their indigenous traditions or through reflecting their authentic African scenario or enjoy of their artwork paintings. However, perhaps it's miles much less the content material or fashion of the works than the origin, area or shape of the artist that showcase them. If you speak approximately the modern-day artwork global these days you're really relating to a global of artwork. Modern artwork sites from Sao Paolo to London, from Kassel to Cape Town all include an array of artists and cultures from the 4 corners of the globe, a lot of whom have been born in Africa. Who are those international artists? And once they make artwork, do they make African Art? Or do they make cuttingedge African artwork? Contemporary Art from Africa or Postmodern African Art? Are those descriptions best relevant for artists which can be from Africa? Or who stay in Africa?

Keywords: - Diaspora Literature, Globalization, Contemporary Art, Displacement.

#### Introduction:

Diaspora Literature includes an concept of a place of birth, an area from wherein the displacement takes place and narratives of harsh trips undertaken resulting from economic compulsions. Basically, Diaspora is a minority network dwelling in exile. The Oxford English Dictionary 1989 Edition (second) lines the etymology of the word 'Diaspora' returned to its Greek root and to its look withinside the Old Testament (Deut: 28:25) as such it references. God's intentions for the human beings of Israel to be dispersed throughout the world. The Oxford English Dictionary right here commences with the Judic History, bringing up simplest forms of dispersal: The "Jews dwelling dispersed some of the gentiles after the captivity" and The Jewish Christians residing out of doors the Palestine. The dispersal (initially) indicates the place of a fluid human self-sustaining area regarding a complicated set of negotiation and alternate among the nostalgia and choice for the Homeland and the making of a brand new home, adapting to the power, relationships among the minority and majority, being spokes men and women for minority rights and their human beings returned home and

Special Issue

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06 April 2022

Website: www.langlit.org

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UGC Spensored One Day Virtual International Conference on Disapora: Literature, Culture and Identity organized by Shri Shivaji Arts & Commerce-College, Amravati, Maharashtra State, India <mark>and Late Navayanrao Amrutrao Deshewikh</mark> Arts & Commerce-College, Chandur Bagar, Amravati, Maharashtra State, India:



IMPACT FACTOR - 5.61

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ISSN 2349-5189



An International Peer Reviewed Open Access Journal

## MULTICULTURAL ATTRIBUTE AND CONFLICTS OF GLOBALIZATION: A STUDY OF KIRAN DESAI'S THE INHERITANCE OF LOSS

#### A.MERCY KIRUBA GLORY,

Assistant Professor, Department of English. KG College of Arts and Science.

#### ABSTRACT

This paper strives to highlight Indian Diaspora literature. It is based on Indian Diasporas writer Kiran Desai who exposes the elements like multiculturalism, globalisation, the quest for identity, nostalgia, cross-culture, etc are found in her masterpiece The Inheritance of Loss. This work of Desai explores, migration, racism, identity, hybridity, cultural homogenization are all on the effect of globalization, the real picture of globalization. This paper also deals with Kiran Desai's The Inheritance of Loss from multicultural perspectives as reflected in the novel. The novel generally surrounds the theme such as multiculturalism, globalisation, and the quest for identity through Jemubhai and his granddaughter, Sai., Gyan and Biju, the Cook's son. They face many difficulties such as cultural hegemony, quest of identities and linguistic competence. Thus, how Kiran Desai brings out the issues related to multiculturalism and globalization in her novel.

Keywords: Multiculturalism, Globalization Quest For Identity, Hegemony, Displacement, Dislocation

#### Introduction

Kiran Desai is one of the finest Indian lady diasporic novelists in Indian English literature. She is the daughter of famous Indian novelist Anita Desai. Kiran Desai studied at Cathedral and John Cannon School. At the age of 14 years, Desai migrated to England, along with her mom for a year. She studied innovative writing at Hollins University, Bennington College and Columbia University in the United State. Her first novel Hullabaloo in Guava Orchard posted in 1998, for which she gained the pinnacle prize for the Betty Trask Awards in 1998 and units in the Indian Village of Shankot (State of Punjab) and a younger guy follows the exploits of Sampat Chawla who attempts to keep away from the duties of person life. Then she posted her 2nd novel entitled The Inheritance of loss (2006) which gained the Man Booker Prize, National Book Critics Circle Fiction Award and Vodafone Crossword Book Award. Kiran Desai makes a speciality of all of the contemporary-day troubles in her novel The Inheritance of Loss, consisting of terrorism, economic, human-relationship, immigration, inequality and marginalization, migration, racism, identity, cultural homogenization are the

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© 2021 IJRAR October 2021, Volume 8, Issue 4

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

## Developing Interest in English Language Teaching Through Multimedia Presentation

## R. SARADHA ASSISTANT PROFESSOR DEPARTMENT OF ENGLISH KG COLLEGE OF ARTS AND SCIENCE

#### Abstract

In learning the English language, now and again understudies have certain hindrances of comprehension and they regularly reject to learn. Accordingly, it is extremely difficult for some understudies to further develop their English language learning level. To cause the understudies to learn all the more independently and successfully, it is important to cause them to be keen on learning. With new innovative apparatuses proceeding to arise, sight and sound assume a vital part in English language instructing. The utilization of Media show offers a possible setting for further developing understudy understanding with regards to language. This paper talks about changing patterns in the English language showing learning features the idea of multimedia clarifies the hypothetical premise of sight and sound English instructing and expresses the critical job of multimedia in rousing student's premium in English language learning.

## Keywords: Multimedia, English Language, Teaching-Learning.

## Introduction

With the spread and improvement of the English language throughout the planet, it has been learned and utilized by an ever-increasing number of speakers. The quantity of English language students is expanding step by step, however for certain understudies learning the English language is one of the most troublesome subjects they have learnt. Due to the challenges in learning, the English language can cause understudies to lose their premium without any problem. Subsequently, teachers must have the option to educate and stir understudies' advantage in the illustration in the homeroom. It is inside the advantage of training that educators should utilize informative systems that are fascinating and invigorating that cause the understudies to learn all the more viably. More current innovation-based educational techniques, fusing the PC based learning materials; particularly media is broadly perceived to hold incredible potential for further developing the way that individuals learn. Accordingly, instructors are currently presenting more and different types of programming and sight and sound show driven media into their homeroom exercises. These inventive show frameworks produce a lot of energy and stand out for students during Englishlanguage learning.

IJRAR21D1106 International Journal of Research and Analytical Reviews (IJRAR) www.ijrar.org

Vol. 5 Special Issue 2 July 2021 E-ISSN: 2456-5571

## ALLEGORY AND DECONSTRUCTION IN GULLIVER'S TRAVELS: A VOYAGE TO LILLIPUT

Dr.S.Rammanohar Pari

Assistant Professor in English KG College of Arts and Science, Coimbatore, Tamil Nadu

#### Abstrac

The aim of this paper is to present the 18<sup>th</sup> century England through satirical novel "Gulliver's Travels (1726) by Jonathan Swift. The treatment of Gulliver in this generously pardoning the Lillipiatans who assailed him with their arrows, is designed to represent the elemency and forbearance with which the Tory Party, under the administration of Harley and Bolingbroke, in the laster years of Queen Anne, deals with political affenders, and especially political libelers. This was the more creditable to his party at a time when it was the received doctrine in West Minister Hall. In the dealings of the Lilliputan court and monarch with Gulliver here detailed we have some of the characteristics of George. Brought out with inaffensive pleasantry, the parsimony that was alarmed at the cost of maintaining so expensive visitor, the generosity and justice that rewarded Gulliver's good conduct.

Keywords: high - heels, low - heels, big - endians, little - endians, secretary, friends, revenue, etc.,

#### Introduction

Jonathan Swift was born in Dublin Ireland in 1667 to English parents. His father died before he was born, mother forced to send him to live with his uncle because she was too poor to raise him. Swift became an Anglican priest. In 1713, he became the dean of St. Patrick's Cathedral a post he held for more than 30 years until his death. He died at his age 78. Gulliver's Travels (1726)—Swift's satirical masterpiece written while living in Ireland. Narrator is Lemuel Gulliver, a doctor on a merchant ship. After a ship wreck, he washes up on the shores of Lilliput. In his "travelogue", he describes his experiences in several fictional countries: Lilliput, Brobdingnag, Laputa, Hoouyhnhams and other. When he returns to England, he is painfully aware of his country's flaws.

In this paper we are going to see the Gulliver's Voyage to Lilliput, which describes satirically the struggles between the Tories and Whigs are symbolized under the name of "High-Heels" and "Low-Heels", there is a religious controversies between two groups "Big Endians" and "Small Endians" are the symbol of Roman Catholic's and Protestants. The "Blefuscu" is the symbol of "France" and "Lilliput" is symbol of "England". Through these allegorical settings and characters Jonathan Swift attacks the England, its Government System, Religion and Political System; even he didn't leaves France also.

#### Allegory

32

The basic meaning of allegory is "to say another thing" or "to speak otherwise". A story, poem, or picture which can be interpreted to reveal a hidden meaning, typically a moral or political one, a story that acts as an extended metaphor in which persons, abstract ideas, or events represent not only themselves on the literal level, but they also stand for something else on the symbolic level. A symbolic fictional narrative that conveys a secondary meaning (or meanings) not explicitly stated. It is a narrative that both a literal meaning and a representative one.

Hunger Artist: Starving for attention?

Dying for one's art? Foolish devotion?

Bodhi International Journal of Research in Humanities, Arts and Science



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ISSN 2349-5189



An International Peer-Reviewed Open Access Journal

# THE DIASPORIC CONSCIOUSNESS AND CULTURAL ASPECTS OF IDENTITY DEPICTED IN THE NOVEL THE NAMESAKE BY JHUMPA LAHIRI

DR. V. RAJESWARI

Assistant Professor of English KG College of Arts and Science Coimbatore

## ABSTRACT-

Literature is an art made up of sculptured words and like a mirror, it reflects the life of human being and perpetuates human thoughts both in terms of time and space. The ever-changing reality of life inevitably reflects itself in literature which reflects the aesthetic features with imaginative and creative writing of the author. From the first century, the major literary works were written in English by inhabitants of the British Isles. The Greek word Diaspora means the scattering of people from their homelan. Diasporic literature deals with homesick, alienation, anxiety, identity crisis and nostalgia. Jhumpa Lahiri, one of the Diasporic American novelists. Her novel, The Namesake is the story of immigrant Ganguli family. In this novel, Jhumpa Lahiri portrayed the Indian diasporic womanism, cultural liminality and search for identity. This article focuses the Immigrant psychology and behaviour of the characters in the novel.

Keywords: Indian Diaspora, Cultural Liminality, Struggle For Identity And Diasporic Consciousness

#### Introduction

Literature is an art made up of sculptured words, like a mirror, it reflects the life of human being and perpetuates human thoughts both in terms of time and space. The ever-changing reality of life inevitably reflects itself in literature which reflects the aesthetic features with imaginative and creative writing of the author. The beginning of English Literature found in the writings of the old and middle English ages.

Literature also brings out the social and political status of the society and it preserves the civilization, language, culture and tradition of the contemporary society. The writers from various countries started their writing in English together with their personal factor and their general movements of literature from age to age. From the first century, the major literary works were written in English by inhabitants of the British Isles. Outside the British Isles, these works were treated separately under American Literature, Australian Literature, Canadian Literature and New Zealand Literature.

#### Diasporic Literature:

English Literature was written in many dialects that corresponded to the region, history, culture and background of the individual writers. A history of English literature

Special Issue

06 April 2022

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UGC Spensored One Day Virtual International Conference on Disappras Literature, Culture and Identity organized by Shrive Conference College Assertable State Ladio and Laterature College Assertable State Ladio and Laterature College Assertable State Ladio and Laterature College Conference College Confer

Shivaji Arts & Commerce College, Amravati, Maharashtra State, India <mark>and</mark> Late Navayanrao Amrutrao Deshmush Arts & Commerce College, Chandur Bagar, Amravati, Maharashtra State, India.

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

ISSN No: 0130-7673

## 3.3.1 / Research Papers Published / Data Template / Row No. 20

NOVIY MIR Research Journal

A Study on the level of Borrowers Satisfaction towards availing home loans offered by Private and

Public Sector Banks in Coimbatore city

Dr. G.Karthiyayini

#### ABSTRACT

This paper aims to measure the borrower's level of satisfaction in relation to accessibility of home loans. A well-structured questionnaire is used to collect the data. Home is the most important human need, next to food, clothing and shelter. Home fulfils many requirements. It is also an investment activity and provides movement to economic development. In consideration of the strategic significance of the housing sector in the emerging Indian economy and the government's major policy thrust to encourage banks' housing financial institution, the banks, especially, public and Private sector banks can do a lot in bridging the gap of demand and supply of funds to home aspirants. This paper examined the satisfaction level and problems faced by the customers while availing the home loan. The data were collected primarily through a structured questionnaire. The required samples, 97 loan borrowers, were collected based on convenience from the details supplied by the Banks in Coimbasore city. From this study using various tools and finding out the level of satisfaction. The study will help the bank to identify the primary factors that motivate the borrowers to avail home loans in public and private sector banks. The result of the study revealed that the satisfaction level about the services provided by public sector banks as well as private sector banks is quite satisfactory to the borrowers. This study suggested that the rate of interest and the amount of EMI should be competitive and loan processing should be quicker by public and private sector banks to attract more customers in the future.

Key Words: Housing, Public Sector, Private sector, Loan, Customer, Bank.

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Volume 6, Issue 10, 2021

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International Journal of Trend in Scientific Research and Development (IJTSRD)

Volume 5 Issue 3, March-April 2021 Available Online: www.ijtsrd.com e-ISSN: 2456 - 6470

## Business Students' Self Perceived View of Their Competence of Performing Employability Skills in Their Future Careers

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#### ABSTRACT

This research was conducted to study the self-perceived level of competence at performing some basic skills needed by business students for managerial careers in business organisations. A total of 20 MBA students of select business school in Coimbatore, participated in this study from a target population of 60 business students. A convenient sampling technique was us due to a time constraint. This study employs an existing employability skills instrument to assess the above objective.

The result of the study indicated that the respondents of MBA students have developed between moderate and major competence to serve as productive employees in the workplace "equally from program and non-program."

It was concluded that the respondents are quite confident with their employability skills. Further research can be done to verify whether a business student's self-perception of his/her competencies are same as those of their existing skill levels 705

KEYWORDS: self-perceived, Competency, career

How to cite this paper: Paramesswari. N | V. C. Praveen Priyaa "Business Students" Self Perceived View of Their Competence of Performing Employability Skills in

Their Future Careers\* Published in International Journal of Trend in Scientific Research and Development (ijtsrd). 2456-6470, ISSN: Volume-5 | Issue-3, April 2021,



pp.57-59. HRI. www.iitsrd.com/papers/iitsrd38666.pdf

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#### INTRODUCTION

According to the Business Council of Australia and the Australian Chamber of Commerce and Industry, employability skills are those "skills required not only to gain employment, but also to progress within an enterprise so as to achieve one's potential and contribute successfully to enterprise strategic directions". Employability skills are also sometimes referred to as generic skills, capabilities or key competencies.

As entry level managers, business students are expected to possess certain set of employability skills. In 2001, the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) conducted a research to elucidate the generic and employability skills required by industry. The results of the project was published in a report titled Employability skills for the future, providing the Department of Education, Science and Training with consolidated industry views on the range of key skills that applied across the range of business contexts including small, medium and large enterprises.

The report identified the following 8 employability skills:

- communication
- teamwork
- problem solving
- initiative and enterprise
- planning and organising
- self-management
- learning technology

These skills are of the utmost importance to a MBA graduate to become employable in any industry.

#### NEED FOR STUDY

Nowadays organisations require newly graduated business students to join with a certain set of competencies. Some of these competencies are tested during the recruitment and selection processes. Many students tend to fail to meet these requirements in the initial stages itself. This may be due to lack of preparation of the student, ineffective learning methods and so on. Therefore it is necessary to understand what the students think about these indispensable employability skills, their self-perception towards the possession of these competencies and whether the program or non-program environment has ensured the gain of the same set of competencies.

#### Objective of the study

The following secondary objectives were formulated to accomplish the purpose of this study:

To describe the students' self-perceived level of competence at performing employability skills necessary for careers in business.

#### LIMITATIONS OF THE STUDY

This study was conducted taking into consideration the selfperceived views of MBA students at Select business school regarding their employability skills. The MBA programs and curriculum varies from institution to institution and therefore this study cannot be generalized beyond the group of students at this institution.

Unique Paper ID - IJTSRD38666 | Volume - 5 | Issue - 3 | March-April 2021

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## Criterion 3 – Research. **Innovation and Extension**

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

## 3.3.1 / Research Papers Published / Data Template / Row No. 22



## Deposits and Credit of Regional Rural Banks in India with Special Reference to Region Wise and State Wise

Dr. K. Vishnupriya1, Dr. N. Eswaran2

Associate Professor, Department of Management, KG College of Arts and Science, Coimbatore Vice Principal, KG College of Arts and Science, Coimbatore

#### ABSTRACT

Regional Rural Banks play a vital role in the growth of the rural economy. The study covered the selected dimensions in terms of deposits, credit and number of branches region wise and state wise. The regional rural bank which helps the vulnerable section of the society to open the bank account and also get bank loans with low rate of interest which has been provided by regional rural banks on behalf of Reserve Bank of India. The study would help to understand how much volume of deposit, credit of regional rural banks in India.

#### INTRODUCTION

Regional Rural Banks (RRBs) are Indian Scheduled Commercial Banks (Government Banks) operating at regional level in different States of India. Rural banking institutions are playing a very important role for all-round development of rural areas of the country. In order to support the rural banking sector in recent years, Regional Rural Banks have been set up all over the country with the objective of meeting the credit needs of the most underprivileged sections of the society. These Regional Rural Banks (RRBs) have been receiving a high degree of importance and attention in the rural credit system. RRBs may have branches set up for urban operations and their area of operation may include urban areas too. The area of operation of RRBs is limited to the area as notified by Government of India covering one or more districts in the State.

#### Statement Of The Problem

Rural Banking institutions play a vital role in the growth and development of rural areas of a developing country like India. In order to support the rural banking sector in recent years, regional rural banks have been set up with the objective of meeting the credit needs of the weaker section of the society. These regional rural banks have been receiving a high degree of importance and attention in the rural credit system. For the recent years, the regional rural banks' growth in terms of deposits, credit, and number of branches have been achieved region wise, state wise in India. The establishment of regional rural banks in rural areas which have been supporting the weaker section of the society. It is to support inclusive growth in the improvement of rural areas. IN this regard, the researchers have focused on "Deposits and Credit of Regional Rural Banks in India with Special Reference to Region wise and State wise".

## Objectives Of The Study

- 1. To study the growth of Regional Rural Banks in terms of number of branches in India.
- To understand the region and state wise deposits and credit of Regional Rural Banks in India.
- 3. To examine the Southern wise and Northern wise deposits and credit of Regional Rural Banks in India.

#### Scope Of The Study

- The study would help to understand the growth of Regional Rural Banks in terms of number of branches in India.
   The study would help to know the region and state wise deposits and credit of Regional Rural Bank in India.
- 3. The study would help to find out Southern wise and Northern wise deposits and credit of Regional Rural Banks in India.

## Limitation Of The Study

- 1. The present study covered the selected variables like deposits, credit and number of branches of regional rural banks in India. Hence, the result of the study was not applicable for other dimensions.
- 2. The study has not focused on financial performance of regional rural banks in India

UARESM Publication, India >>>> www.ijaresm.com

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'Dogo Rangsang Research Journal" – Volume -12, Issue-05, ISSN 2347-7180, May 2022
MEASURING CONSUMER PREFERENCES AND ATTITUDE FOR PETROL BRANDS
Ms. Nagarathinam<sup>1</sup> & Dr. Chitrakala<sup>2</sup>

## ABSTRACT

Understanding buyer behavior is critical in marketing strategy and execution. Purchasing behavior is one of the most important factors in marketing success. It is a procedure. Prospective customers are exposed to a variety of triggers. We regard the customer as a black box because we cannot see what is progressing in his mind. The consumer reacts to the marketing executives. The buyer behavior model is a stimulus-response model. The response to the marketing could either be a purchase or no-purchase decision. The oil industry is the dominant sector in the current scenario with the surge in the price of petrol and diesel products, the industry has started to witness a deep note from almost all of them where the brands have their own outlets to service the customers. In this regard, the present study was conducted to assess consumer preferences for retail outlets (petroleum corporations) for this purpose. It aids in the identification of consumer perceptions of petroleum corporations as well as the creation of brand image among petroleum corporations.

## Keywords

Consumer, preferences, petrol, brands, attitude, marketing

## INTRODUCTION

The business environment of the twenty-first century is vibrant, subject to quickly evolving circumstances, making it critical for enterprises to revamp their activities in order to provide excellent superior customer value. Understanding consumer behavior is one important approach. The latter is vast and varied, but one of its most recent components is consumer preference. Consumer preference research will enable businesses to reach consumer choice influence strategies. Furthermore, in order for businesses to be able to deal with these competitive industry challenges, they should implement a variety of organizational strategies focused on providing a better quality-price ratio.

In marketing, consumer preference refers to the possibility of choosing one thing over another. According to this study, it is a procedure in which customers gather relevant information about a product attribute and process the data based on their preferences before assigning a value

Research Scholar (PT), Dr.G.R.Damodaran College of Science, Coimbatore, Assistant Professor, KG College Of Arts and Science, Coimbatore.

RESEARCH PAPER

International Journal of Management and Development Studies ISSN: 2320-0685 (Online) | Vol.10 | No.09 | September 2021 | pp. 1-10 Deakle-Bland For Reviewed Referred Journal

## Analysis of Long-Term Financial Position of Selected Steel Companies in India

Dr. M. Anandan and Dr. P. Ashok

'Assistant Professor, Department of Commerce, Karpagam Academy of Higher Education (Desmed to be University), Coimbatore

Assistant Professor, Department of Management, KG College of Arts and Science, Coimbatore

#### Abservace

India was the world's second largest steel producer in 2019. In the year 2019 the steel production was standing at 111.2 million tonnes. The grouph of Indian steel sector is based on domestic availability of raw materials such as from one and confective labour. Consequently, the steel sector has been major contributor to India's manufacturing output. This study tries to find out the long-term financial position of selected steel companies in India. Pive steel companies have been selected for the study. The period of study is taken from 2015 – 16 to 2019 – 2020. Various tools used like Mean. Standard Deviation, Coefficient of Variation, Alvova and Carrelation were used for this study.

Knywords: Financial Pasition, Smel Companies, labour, surput.

#### Article Publication

Published Online: 31-5ep-2021

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#### Entroduction

India is the second largest steel producing country in the world in 2019. In the year 2019 the steel production was standing at 111.2 million tonnes. Stainless steel consumption is more in our day to day life. It also plays a vital role in our countries economic development. Without steel it is highly difficult to maintain our standard of living. The Growth of all the industries in India helps to improve the economy out of which steel is one main Industry. Without steel it is highly difficult to establish industries like fertilizers, construction, transportation, power generation, housing etc. The production of steel is increased because of modernization, energy efficiency, establishment of world class steel plants, qualities etc.

## Statement of the problem

India is the second largest steel producing country in the world; it is facing lot of problems. One of the main problems which are faced by steel companies is finance. Finance is considered to be the life blood and nerve center of business. Every company measures its short term and long term financial position. The short term financial position of a company can be met only when there are sufficient liquid assets. If the company would not be maintained short term financial position, they will consequence to meet out it short term financial obligation. The long term indebtedness of a company includes debenture holders, financial institutions providing long term loans and other creditors selling goods on instalment basis. The study examines short term and long term financial position of selected steel companies in India.

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### Parishodh Journal

ISSN NO:2347-6648

## A STUDY ON BRAND EXTENSION OF CONSUMER EQUITY OF AAVIN MILK PRODUCTS WITH SPECIAL REFERENCE TO COIMBATORE DISTRICT

### AUTHOR:

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#### ABSTRACT:

Dairy industry is one of the fine industry in business field. When comes to Aavin milk products. It is the most prior product used by the consumers all over Tamil Nadu. We can also say that it is also one of the income generated source to government. Aavin is the satisfying product in this field. The study mainly focuses on the consumer equity of Aavin milk products with their brand extension. The study focuses on the consumer equity, brand extension and their preferences towards the product.

INDEX KEYS: Consumer Equity, Dairy Products, Brand extension.

### INTRODUCTION:

India is the highest milk producing country in entire globle. A dairy industry is the rapid growing industry in India. It is also income generated sector. It has more than 13% of world's total milk production and it also has the world's largest dairy herd. This is because India has 75 million dairy farms.

The Dairy Development in Tamil Nadu established in the year 1958. The Tamil Nadu Dairy Development Corporation Limited was formed in July 1972 to manage the activities such as milk procurement, processing and marketing of the milk and milk products.

Volume X, Issue VI, June/2021

Page No: 106

ISSN NO: 0586-9367

Page No: 1943

## 3.3.1 / Research Papers Published / Data Template / Row No. 26

The International journal of analytical and experimental modal analysis

# Comparison study on consumers perception and satisfaction towards buttermilk and yogurt products in coimbatore district

Dr.M. Lavanya 1, Assistant Professor, Department of Commerce, KG College of Arts and Science, Colmbatore.lavanyasna38gma11.com

#### Abstract

Our dietary choices are not only important for satisfying our appetite and providing us with energy, but they are also important for sustaining our general health. Our diet has the potential to be both the cause and the cure for our illustres. As a result, deciding what kind of food is best for your health might be difficult. The difference between stury and buttermilk is one such widespread misunderstanding. Both card and buttermilk are healthy foods. They are both beneficial natural problems for the intestines. Buttermilk can help with digestion, hyperacidity, hearthurn, and other stomach problems. Curd too is nutritious and has therapeutic effects when consumed in the right way. In truth, buttermilk is a by-product of curd, and the two are nutritionally equivalent. But, contrary to popular belief, buttermilk is not simply curd that has been diluted. Between the two, there's a world of difference. Buttermilk is the liquid left behind after the curd has been churned. To separate the fats, it is first diluted with water and churned. Herbs and spices are added to the buttermilk after it has been separated to increase in advantages. Crushed and added spices include cumin, pepper, ginger, green chilies; curry leaves, and coriander leaves. This improves the drink's flavour as well as its medicinal properties.

Keywords- Buttermilk, Yogurt, Nutrition, Flavours

## I. INTRODUCTION

Commercial buttermilk is prepared by pasteurizing fermented milk with bacteria that produce acidic compounds. This gives buttermilk its taste and texture, which is creamy and buttery. Yogurt is the product of the fermentation and processing of milk. There are 2 types of yogurt: the first type is sweet and often mixed with fruits and sugar. The second type of yogurt is sour and salty, which is directly consumed without processing after fermentation. Yogurt has a wide range of usage in the culinary world. It is often used as plain yogurt, used as a component in cooking, or made dessert. This paper will look into the differences and similarities of buttermilk and yogurt and how they impact our health. The buttermilk taken into consideration in this article is low-fat buttermilk. The yogurt taken into consideration is non-fat yogurt, curd and buttermilk are both healthy and nutritious choices. Both have their own set of benefits. But if you weigh the digestive benefits and weight loss properties then buttermilk is superior to curd. As per Ayurveda, the root cause of all diseases is low digestive fire and buttermilk is an excellent digestive. It amps up your digestive fire and heals your system from inside. Further, the herbs and spices in buttermilk have great therapeutic effects. But if you are advised to limit your fluid intake or you are aiming to gain weight then the curd is the better choice. However, you must take care to consume curd in the right way at the right time! Nutrient content - Buttermilk is rich in calcium, vitamins B12, zinc, riboffavin, and proteins. It helps in keeping your bones healthy, lowering the level of bad cholesterol, preventing cancer, battling stress, and anemia due to the presence of these nutrients. On the other hand, curd contains calcium, phosphorus, vitamins B12, B5, B2, potassium, proteins, and molybdenum. These nutrients prove to be beneficial in preventing chances of hypertension and heart diseases, promoting teeth and bone health, and reducing stress and anxiety.

#### II. NUTRITION SUPPLEMENTS

Buttermilk and yogurt are considered among the foods that contain the highest amounts of calcium, among other nutritional elements. Buttermilk and yogurt are mostly composed of water. In 100g of buttermilk, there is 90g of water, and for 100g of yogurt, there is 85g of water. The bacteria used to make yogurt are called "yogurt cultures," which ferment lactose, the natural sugar found in milk. This process produces lactic acid, a substance that causes milk proteins to curdle, giving yogurt its unique flavour and texture. Plain yogurt without added colorants is a white, thick liquid with a tangy flavor. However, most commercial brands contain added ingredients, such as sugar and artificial flavors.

Volume XIV, Issue V, May/2022

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

## 3.3.1 / Research Papers Published / Data Template / Row No. 27

Shodhsamhita: Journal of Fundamental & Comparative Research

Vol. VII, No. 8: 2021 ISSN: 2277-7067

# A STUDY ON CRM IN HOTEL INDUSTRIES – WITH SPECIAL REFERENCE TO COIMBATORE CITY

Dr.J.K.Bharath Assistant Professor & Head, Department of Commerce CA, KG College of Arts and Science, Coimbatore,

#### Abstract

Since time immemorial, the art of hospitality is being enhanced by man through umpteenth number of ways and methods. It, perhaps, finds its roots to the kings and lords from upper-class family who took great care and attention in treating their guests with utmost grandeur and stateliness. Even the smallest of their wishes had been given meticulous attention. The hosts were very proud to be of their service, and they considered it their duty and responsibility to see that their guests felt at home under their keeping and protection. Management spend time and money to educate the staff to face the customers, fulfil the customers requirment and to retain the customers. The customers may not understand the concept of customer retention management, but the customers may understand how far the staff make them comfortable and happy in this hotel. The scope of the study is to study the consumer attitude and perception of CRM practices of star hotels in coimbatore. The following are the objectives of the study. To study the CRM in Hotel Industries, To study the socio-economic profile of the customers and the employees of the star hotels in Coimbatore district. The study concluded that it is extremely important to note that while customer-centric approach is critical, no relationship can be successfully initiated and managed without happy, satisfied, trained, motivated and empowered employees. By using the CRM model suggested for hotel, hospitality firms can maximize profitability and productivity of their CRM efforts.

## INTRODUCTION

Since time immemorial, the art of hospitality is being enhanced by man through umpteenth number of ways and methods. It, perhaps, finds its roots to the kings and lords from upper-class family who took great care and attention in treating their guests with utmost grandeur and stateliness. Even the smallest of their wishes had been given meticulous attention. The hosts were very proud to be of their service, and they considered it their duty and responsibility to see that their guests felt at home under their keeping and protection.

The expansion of commerce and travel paved the way for the advent of hospitality industry. As the people, upon compulsion or necessity, started moving from one place to another, they had to stay at a place for a night, or for a day or for a week or a month or for several years. These circumstances had made it essential for inns and other private places of hospitality to start sprouting. As the needs and wishes of the guests who stayed in those places expanded, the hosts had to think over several means and methods of fulfilling them. This was the humble beginning of the hotel industry. The expansion of towns and cities together with the visitors under the guise of travelers was another reason for the growth and development of hotel industry. This, in turn, paved the way for the healthy competition among the hosts.

At present, the hotel industry is a global issue. The number of people who move from one place to another has been on the increase. They choose their places of stay according to their social status. People at the highest rung of the society, naturally, go in for the lofty and pompous places where they are sure of getting every luxury. This is the main reason for the advent and growth of star hotels.

## SCOPE OF THE STUDY

Star hotels are having a good number of customers and have image in the public, having repeated customers. The hotel managers and supportive staff should understand the importance of the customers and customer service. Management spend time and money to educate the staff to face the customers,

Journal of Kavikulaguru Kalidas Sanskrit University, Ramtek

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## Criterion 3 – Research. **Innovation and Extension**

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

## 3.3.1 / Research Papers Published / Data Template / Row No. 28

Indian Journal of Natural Sciences



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RESEARCH ARTICLE

Vol.12 / Issue 67 / August / 2021 International Bimonthly (Print)

ISSN: 0976 - 0997

## A Study on Data Mining Techniques for Cyber Security

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Received: 23 May 2021 Revised: 30 May 2021 Accepted: 11 Jun 2021

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## ABSTRACT

Cyber security is that the world that deals with protecting from cyber terrorism. Cyber-attacks include access control violations unauthorized intrusions and denial of service also as insider threat. Security of a data or information system is its vital property especially today when computers are interconnected via internet. Because no system is often absolutely secure the timely and accurate detection of intrusions is important. For this purpose, Intrusion Detection Systems were designed. The IDS together with data processing can provide the safety with next level data processing is that the process of posing queries and extracting patterns, often previously unknown from large quantities of data using pattern matching or other reasoning techniques. This Paper gives the over view of the various data processing techniques which may be utilized in Cyber security for intrusion detection.

Keywords: Cyber security, Intrusion Detection System, Data Mining.

## INTRODUCTION

Cyber security cares with protecting computer and network systems from corruption owing to malicious software including Trojan horses and viruses. Data processing for cyber security applications for instance, anomaly detection techniques might be want to detect unusual patterns and behaviours. Data processing or mining is that the process of identifying patterns in large datasets. Data processing techniques are heavily utilized in research project also as in business, mostly to collect statistics and valuable information to improve customer relations and marketing strategies. In this paper, we specialise in data processing application for cyber security. To grasp the mechanism to be adopted so as to safeguard the computers and network, it's imperative to know the kinds of threats that endanger the cyber network.



Vol-7 Issue-2 2021

IJARIJE-ISSN(O)-2395-4396

# Parallel DataMining of Frequent Itemsets Using MapReduce

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Abstract: Existing parallel burrowing counts for visit itemsets don't have a part that engages modified parallelization, stack altering, data apportionment, and adjustment to non-basic disappointment on colossal clusters. As a response for this issue, we diagram a parallel visit itemsets mining estimation called FiDoop using the MapReduce programming model. To achieve pressed limit and go without building prohibitive case bases, FiDoop combines the normal things ultrametric tree, rather than common FP trees. In FiDoop, three MapReduce occupations are executed to complete the mining task. In the fundamental third MapReduce work, the mappers openly separate itemsets, the reducers perform blend etrands by building little ultrametric trees, and the genuine mining of these trees autonomously. We realize FiDoop on our in-house Hadoop bundle. We exhibit that FiDoop on the gathering is sensitive to data allotment what's more, estimations, in light of the way that itemsets with different lengths have unmistakable rot and advancement costs. To gain ground FiDoop's execution, we develop a workload modify metric to measure stack change over the gathering's enrolling centers. We make FiDoop-HD, a development of FiDoop, to quicken the digging execution for high-dimensional data examination. Wide tests using genuine perfect unearthly data delineate that our proposed course of action is viable and flexible.

Index Terms - Frequent Pattern Growth, Apriori, Rapid Association Rule Mining (RARM), ECLAT, Data Mining, Frequent Patterns, MapReduce.

#### I. INTRODUCTION

Mining of frequent itemsets (FIM) is the main problem in mining of data using sequence mining algorithm, association rule of mining algorithm (ARM) and in the similar places. Among all types of data mining, frequent items pattern mining in the data mining subject. There are a lot of researches have been made and lots of efficient algorithms have been designed to search frequent pattern in the large transactional database. Agrawal et al for the first time in 1993, has proposed a concept market-based form of analysis of pattern for finding the relation between items that are fetched in a market places. The market-based analysis concept used the transactional databases and other databases and repositories which collects data in order to extract association rule's casual structures, their inter relations or frequent patterns among the dataset. Frequent patterns are the items or itemsets which repeatedly occur in database transactions with a user-specified frequency. An itemset whose occurrence frequency is greater than the minimum threshold will be considered as the frequent pattern. For example in market based analysis if the minimum threshold is 30% and bread appears with eggs and milk more than three times or at least three times then it will be a frequent itemset.

During the data mining of item pattern stage, there are different methods and techniques are used to get the candidate keys for frequently occurring patterns and generation of frequent patterns are carried out. In this stage, there are two main problems for mining the frequent pattern itemsets. The main problem is that the database is required to scan every time the search is doing, and the other one is each time when it scans the database, it generates a huge and complex dataset and it'll take huge time in scanning the same. These are the main two drawbacks in frequent pattern mining. There are a lot of studies have performed on this and efforts have been put to overcome and it results in finding different approaches and algorithms which are really useful. Some of the approaches are like Apriori, FP Growth, ASPMS RARM, ECLAT algorithms etc.

#### II. LITERATURE SURVEY

### 2.1. Mining of Frequent Itemsets

The Apriori algorithm is a classic way of mining frequent itemsets in a database. A selection of Apriori-like algorithms intention to shorten database scanning time by way of decreasing candidate itemsets. For instance, Park et al. proposed the direct hashing and pruning algorithm to govern the number of candidate two-itemsets

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Endowment, vol. 5, no. 5, pp. 406-417, 2012.

## 3.3.1 / Research Papers Published / Data Template / Row No. 30



L. Wu, X. Xiao, D. Deng, G. Cong, A. D. Zhu, and S. Zhou, "Shortest path and distance queries on road networks: An experimental evaluation," Proc. VLDB

## Seshadripuram Journal of Social Sciences (SJSS)

Peer Reviewed Open Access Journal

Vol.3, Issue 1, November 2021

Journal Home Page: https://mcom.sfgc.ac.in/online-journal

ISSN 2581-6748

## IMPACT OF DIGITAL MARKETINGON Z GEN WITH SPECIAL REFERENCE TO COIMBATORE CITY

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#### ABSTRACT

Today digital marketing has become most effective tool to promote the activities of business through digital media by connecting the relationship with the customers by just a click away from digital tools like electronic media and social media. With the increase in use of technology small producers can also reach their customer globally. Thus, reaching out to customers through usage of internet is digital marketing.

For past few decades new technology has empowered customer. Digitalmarketinghas completely transformed the market scenario of today's generation due to advanced technology and high competition in the market. Z generations are more impacted because they expect a more consistent and personalized experience by unlimited access to information and demand products and services when they want. They are not loyal customers anymore but they look for products online for the day before visit the physical store, read other customers review, assess the price and delivery etc. Thus, digital marketing has an incredible influence on people interaction, work, purchase and life habits. Thus, the present study is conducted to find out the impact of digital marketing on Z generations with special reference to Coimbatore city.

Keywords: Digital marketing, Z Gen, Digital tools, Competition.

## INTRODUCTION

Digital marketing is a digital platform to market a product/ services. Digital marketing creates a new relationship between marketing and technology. Due to this development and popularity of social media have made worldwide communication easier than ever and have deeply influence not only the business but also consumers to make purchase decision which advancement of online marketing. Currently digital marketing is overflowing with ever rising opportunities and peoples are having various choice to access for availing the product or services and they gather information whenever and wherever they desire through various

Seshadripuram Research Foundation, Bengaluru



Revista Review Index Journal of Multidisciplinary 2022; 2(1):16-21

eISSN: 2583-0031

Double-blind peer reviewed | Refereed Quarterly Online Journal

## Factors influencing and Customers' Gratification towards Wireless Data card Services in Coimbatore City

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#### Aberrac

Currently, human being life style has been changed due to technologies improvement in a variety of fields. Wideband has providing new proportions to life now-a-days. It's a excessive source to search for data as well as information about anything around the world. Its help to communicate the message across the borders with a span of time. Present study focuses to factors influencing and Customers' Gratification towards. Wireless Data card Services and its Sample size of 150 respondents has been taken for this research paper and by adopting snowball sampling techniques. The findings of the research paper reveal that the customers are highly preferred the Airtel wideband service followed by Jio wideband services when compared to other brands. This research paper suggested that some measure has to be taken by additional service providers to improve the quality of their service and create an inspiration variety of plans.

Keywords: Broadband Services, snowball sampting, Rank analysis using Kendall's W and Chi-square test

## Article Publication

Rublished Online: 31-Mar-2022

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Index Journal of Multidisciplinary

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#### Introduction

In the world, second largest telecommunication network operating is India. Most of the sectors in Indian wireless industry are mobile phone, network and TV industry in the country. Wireless Communication has played an important role in the development of socio-economic and also has helped to increase the translucency of governance. Now – a days mobile communication has been growing rapidly and the growth of the wireless wideband technologies leads to increasing demand for mobile network and other service.

In India there are many telecommunication sectors that act as a service provider in the market by providing the broadband facility. Most Internet providers offer a Wireless Data card service (Data card) as part of a start-up package for a customer, and it is typically available for either rental or purchase. One can get a data card connection either with license or without license. Licensed connection enables to have access to private spectrum and getting license is pretty costly, so it is generally availed by big organizations.

Airtel, Reliance, BSNL, Jio, Tata Indicom, Idea, MTS and Vodafone are the famous service providers play a vital role and provide a variety of plans such as pre-paid and post-paid plans in the Wireless Data card markets.

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International Journal of Trend in Scientific Research and Development (IJTSRD) Volume 6 Issue 2, January-February 2022 Available Online: www.ijtsrd.com e-ISSN: 2456 - 6470

## Challenges and Opportunities for Indian Companies in E-Tailing their Products during Pandemic

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#### ABSTRACT

India is largely dependent on agricultural economy. More than fifty percent of Indian population is dependent on the agricultural sector for its livelihood and survival. On the other hand the service sector, manufacturing sector, defence sector, aviation sector, travel and hospitality sector employs few of the Indian labour force and its return nearly 60% of the Indian GDP. This can accelerate the India's economic growth and solve the current unemployment crisis. "Make in India" is a worldwide marketing concept propounded by our 15th and the current Prime Minister of India on 25 September 2014, with an aim to transform the country into a global manufacturing hub. Mission is to make in India and sell the products all over the world. Its ultimate aim is to transform India into a global design and manufacturing hub. It facilitates investments, skill development, encourages innovation, protect intellectual property rights to achieve this objective. Ministry of Commerce and Industry's Department of Industrial Policy and Promotion plays a vital role for the implementation of this initiative and it holds highly significant position in India's pursuit of economic growth. In a short space of time, web retailing or e-following has solidly secured itself as a reasonable choice to store based shopping. This paper endeavours to give an unmistakable picture about the e-following in India and its different issues, openings. It additionally endeavours to draw a compelling e-following methodology in India dependent on the itemized review of e-following organizations. The purpose of the paper is to identifying issues related to manufacturing, sector and the government support to enhance the development of the sectors.

How to cite this paper: Ms. R. Janani | Ms. N. Paramesswari "Challenges and Opportunities for Indian Companies in E-Tailing their Products during Pandemic" Published in International

Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-6 | Issue-2, February 2022, pp.1325-1327, URL:



www.ijtsrd.com/papers/ijtsrd49371.pdf

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KEYWORDS: Make in India, Challenges, Sectors, Retailing issues

## INTRODUCTION

The fifteenth and current Prime Minister of INDIA "Narendra Modi" proposed the MAKE IN INDIA" campaign on September 25th 2014 in New Delhi. He welcomes foreign firms to invest their finance in INDIA and also ask the CEOs of national firms to put resources into our nation by saying that, "There is no compelling reason to leave the country. We want our companies to glow as MNCs". The MAKE IN INDIA program established the foundation of India's new national manufacturing policy and rolled out to provide the first class red carpet for both national and international industrialists with a mission to make India a manufacturing hub which will in turn accelerate the employment rate and overall growth and development of India. The program lays emphasis

on 25 divisions. The objective of this scheme is to make sure the manufacturing segment which contributes around 16% of nation's GDP could be increased to 25% in next 5 years. Make in India campaign eradicate unnecessary laws and controls. Three major sectors which contribute to GDP of any country are agriculture, manufacturing and services. As per the present contribution of all these sectors to Indian economy manufacturing contributes only 16% which is lowest. There are ample of opportunities to be grabbed as far as Indian manufacturing sector is concerned. Numerous business man and entrepreneurs vision for make in India initiative is for the betterment of our Indian economy.

@ IJTSRD | Unique Paper ID - IJTSRD49371 | Volume - 6 | Issue - 2 | Jan-Feb 2022 | Page 1325

www.ijcrt.org

© 2021 IJCRT | Volume 9, Issue 10 October 2021 | ISSN: 2320-2882

RT.ORG

ISSN : 2320-2882



## INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## WORK LIFE BALANCE AFTER LOCKDOWN IN COIMBATORE

(with special reference to IT Sector)

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#### ABSTRACT

Liberalization, Privatization and globalization policy of Government of India has brought a sweeping transformation in Indian economy in last twenty - five years. Labour market has witnessed increasing employment opportunities for young talented manpower in IT sector. It has changed the demographic profile of employees accompanied with good pay package and international exposure. In a society filled with conflicting responsibilities and commitments, work life balance has become a predominant issue in the workplace. Work/life balance, in its broadest sense, is defined as a satisfactory level of involvement or 'fit' between the multiple roles in a person's life. Work life balance is measured mainly by using three factors: Time balance - which concerns the amount Of time given to work and nonwork roles, Involvement balance - meaning the level of Psychological involvement in, or commitment to work, non-work roles and Satisfaction balance or the level of satisfaction with work and non-work roles. Covid-19 pandemic that hit the world caused changes in all areas of the fabric of people's lives. Perceived changes, one of which is in the world of work, are causing changes in order and rules in the field of human resource management.

Key words: Work Life Balance and IT Sector

IJCRT2110123 International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org

Kanpur Philosophers ISSN 2348-8301

International Journal of humanities, Law and Social Sciences
Published biannually by New Archaeological & Genological Society

Kanpur India



Vol. VIII. Issue VI: 2021

# A STUDY ON CUSTOMER SATISFACTION IN ONLINE BANKING IN PRIVATE SECTOR BANKS DURING COVID-19 IN CHENNAL.

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#### Abstract:

The concept customer satisfaction indicates the fulfilment that customers derive from doing business with a firm. In other words, it is how happy the customers are with their transaction and overall experience with the company. Customers derive satisfaction from a product or a service based on whether their needs are met effortlessly in a convenient way that makes them loyal to the firm. Hence, customer satisfaction is an important step to gain customer loyalty. The purpose of this study the satisfaction in online banking during COVID 19. A survey has been done to achieve the objectives of this paper. The study employed 100 bank customers as its sample size. The study collected its data through primary data.

KEY WORDS: Online banking, COVID 19, customer satisfaction.

## INTRODUCTION:

## Online banking:

Online banking reduces customer's visit to bank and reduces manual work. It saves a lot of time of customers. The COVID - 19 pandemic has accelerated the process of digital banking due to its numerous benefits. Smartphone usage has resulted in an additional surge in online banking during COVID - 19 pandemic. Online banking means converting all traditional banking services to online mode. These services include deposits, transfer, withdrawals, account handling, loan management, etc.

Since Online banking is one of the major services offered by banks, it should be a highly secured platform. Banks generally use encryption device to ensure protection of the clients' information and ensure no security breach. The customers are protected in such a way that they are ultimately protected from online frauds.

#### OBJECTIVES

 To understand the demographic factors of the respondents on online banking services provided by private sector banks during COVID – 19.

Kanpur Philosophers ISSN 2348-8301, Volume-8, Issue-6, 2021

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3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

## 3.3.1 / Research Papers Published / Data Template / Row No. 36

The International journal of analytical and experimental modal analysis

ISSN NO: 0886-9367

## CUSTOMER SATISFACTION TOWARDS PRIVATE BANK SERVICES-A STUDY IN COIMBATORE CITY

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#### ABSTRACT:

Finance is the motivation power for every business whether it is profit making or loss-making business. Economy of the country grows with the developing mindset of people in the country. No other option is available to raise the country economy without increase of the financial position of resident peoples. Banking sector play a major role to provide financial assistance to the residents of the country. It also plays a major role in the growth of the economy by providing their various services to the general public. Customer satisfaction is fundamental for the future growth of bank and country economy. This study is made to determine customer satisfaction level on private banking services.

Keywords: Bank Customer Satisfaction, Banking Services, Economic Growth

## INTRODUCTION:

Initially all the banks in India were private banks, which were founded in the pre-independence era to cater to the banking needs of the people. The Government of India has issued an ordinance and nationalized the largest commercial banks of India. In 1994, the Reserve Bank of India issued a policy of liberalization to license the limited number of private banks, which came to be known as New Generation tech-savvy banks.

Customer satisfaction has two aspects: one's expectation of customers and second high quality and timely services provided by the bank and effect the influence on customer satisfaction. From this study it can help to identify the overall customer satisfaction level. "Customer satisfaction

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3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

## 3.3.1 / Research Papers Published / Data Template / Row No. 37

The International journal of analytical and experimental modal analysis

ISSN NO: 0886-9367

## Export barriers on Micro, Small and Medium Enterprises (MSME) in India

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#### Abstract

Micro Small and Medium enterprises (MSME) form a large part of private sector in many developed and developing countries. <sup>1</sup> It is a major contributor for the socio-economic development of the country. It plays a role in creating jobs in various areas where they employ around 60-70% of workers and can be an important source of improving the economic activity. There is evidence that MSMEs will support greater economic extensiveness, for example by promoting partaking of women as entrepreneurs in the workforce. The number of MSMEs is increased by a CAGR of 18.5% from 2019 to 2020. IN FY21, the loan disbursals to MSMEs stood at Rs.9.5 trillion, a 40% increase compared with Rs.6.8 trillion. <sup>2</sup> Most of this export-led growth in the GDP can be attributed to free-trade policies, rise in public spending, favorable taxation policies, growth in private investments and reforms in the financial sector that increased FDI inflow. Contribution of exports to India's GDP stood at 31.5% in 2018-19 and recorded marginal decline to 27.8% in 2019-20. <sup>3</sup> This paper reveals the barriers that SMEs are likely to come across in export markets and also the available policy tools aimed at their decline or exclusion.

## Keywords: MSME - Export Barriers

#### Introduction:

MSMEs are a major source of job creation and economic growth but tend to be under represented in their share of international trade flows relative to their contribution to national and regional economies. MSMEs are in a prone position in relation to barriers mainly because of their size, which discourages internationalization. Overcoming the barriers, it requires vital investment in time and resources as well. As a result, an MSME may be reluctantly engaged in fully take of advantage of available government consultation mechanisms and strategies for

Volume XIV, Issue V, May/2022

# **Design Engineering**

ISSN: 0011-9342 | Year 2021 Issue: 8 | Pages: 4008-4025

# Improved Hyper Elliptical Curve Cryptography using Butterfly Optimization Algorithm for Secured Authentication and Encryption for IoT Healthcare Applications

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Abstract- Protection of patient's clinical data in remote e-health applications is highly challenging since the current significant authentication schemes face high complexities in terms of computation and communication costs. Elliptical Curve Cryptography (ECC) and its variants tried to reduce these costs but adversely reduced the processing speed and increased the storage costs leading to security threatsfrom various adversaries. Therefore, this paper aims at developing an efficient authentication and encryption methodology to overcome the high computation, communication and storage costs as well as the slow processing issues. This paper proposes Improved Hyper Elliptical Curve Cryptography (IHECC) in which introduces an auxiliary input key for encryption, selected optimally by Butterfly Optimization Algorithm (BOA). This proposed IHECC authentication and encryption utilizes the genus-3 hyper elliptic curves to improve the throughput and security while also reducing the complexity and storage costs through smaller encryption messages. The selection of additional auxiliary input key by the BOA improves the security limitations faced in ECC and its variants. The simulations are done using MATLAB and the experiments are conducted to evaluate the performance of the proposed model by comparing it with the existing Rivest Shamir Adleman (RSA), ECC and IECC schemes. The results showed that the proposed IHECC scheme outperforms existing schemes with reduced computation, communication and storage costs while also decreasing the encryption/decryption time and improving throughput.

Keywords: Wireless Body Area Networks, Internet-of-Things, Elliptical Curve Cryptography, Improved Hyper Elliptical Curve Cryptography, Butterfly Optimization Algorithm.

[4008]

## INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY



## RESEARCH ARTICLE



OPEN ACCESS

Received: 02.08.2021 Accepted: 17.10.2021 Published: 18.11.2021

Citation: Aswanandini R, Deepa C (2021) Hyper-Heuristic Firefly Algorithm Based Convolutional Neural Networks for Big Data Cyber Security. Indian Journal of Science and Technology 14(38): 2934-2945. https://doi.org/ 10.17485/JST/v14i38.1401

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Funding: None

Competing Interests: Nane

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Published By Indian Society for Education and Environment (ISee)

ISSN

Print: 0974-6846 Electronic: 0974-5645

## Hyper-Heuristic Firefly Algorithm Based Convolutional Neural Networks for Big Data Cyber Security

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## Abstract

Objectives: A highly accurate Intrusion detection model is developed that classifies both the network-based and host-based intrusions without any complexity issues. Method: An optimized Deep Learning (DL) algorithm of IDS model is presented in the form of a Hyper-Heuristic Firefly Algorithm based Convolutional Neural Networks (HHFA-CNN). This proposed HHFA-CNN reduces false values and improves accuracy without increasing the complexities. Findings: The proposed HHFA-CNN system is performed on two network traffic datasets: NSL-KDD and ISCX-IDS. The outcomes demonstrated that the proposed HHFA-CNN model gives predominant execution than the other existing models. Novelty: The proposed model has employed a novel Hyper-Heuristic Firefly Algorithm for optimizing the hyper-parameters of the CNN. This model maintains the standard guidelines of the firefly algorithm and applies the high-level technique for controlling the exploration and determination of low-level heuristics.

Keywords: Big data; Cyber security; Intrusion detection system; Hyper-Heuristic Firefly Algorithm; Convolutional Neural Networks

#### 1 Introduction

With the introduction of advanced technologies in the recent years, the big data analytics have attained significant interest in various domain applications such as medicine, healthcare, education, smart cities, environment analytics, business analytics, data processing and cyber security (1). As most businesses are operated over the internet in the modern big data age, the cybercrimes are not only limited to hacking the business information but has also intruded towards the common man. The increasingly complex as well as intelligent cyber threats have resulted in massive destructions (2). Cyber security has become a vital part of any domain and has attracted big investments to protect the data and also the organization systems (3). The conventional cyber security systems cannot detect all advanced threats such as the dental of service, spoofing, brute force, and SQL injection, etc. Also, these systems face difficulties in handling both the system operations and threat analysis together as a huge amount of security

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## Criterion 3 – Research. **Innovation and Extension**

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

## 3.3.1 / Research Papers Published / Data Template / Row No. 40

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doi: 10.17586/2226-1494-2022-22-1-93-100

## Dimensionality reduction of the attributes using fuzzy optimized independent component analysis for a Big Data Intrusion Detection System Rajan Aswanandini<sup>120</sup>, Chandran Deepa<sup>2</sup>

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Big data cybersecurity has garnered more attraction in recent years with the development of advanced machine learning and deep learning classifiers. These new classifier algorithms have eignificantly improved intrusion Detection Systems (IDS). In these classifiers, the performance is positively influenced by high relevant features while less relevant features negatively influence the performance. However, considering all the attributes, especially the high dimensional attributes, increases computational complications. Hence it is essential to diminish the dimensionality of the attributes to improve the classifier performance. To achieve this objective, an efficient dimensionality reduction approach is presented the classifier performance. To achieve this objective, an efficient dimensionality reduction approach is presented through the development of the Funry Optimized Independent Component Analysis (FOICA) is complet with the funry entropy to transform the high dimension attributes into low dimension attributes and helps in selecting high informative low-dimensional attributes. These selected fastures are fed to efficient hybrid classifiers namely Hyper-heuristic Support Vector Machines (HH-SVM). Hyper-Heuristic Improved Particle Swarm Optimization based Support Vector Machines (HH-SVM) and Hyper-Heuristic Firefly Algorithm based Convolutional Neural Networks (MHFA-CNN) to classify the cybersecurity data to identify the intrusions. Experiments are conducted over two cybersecurity datasets and real-time laboratory data whose outcomes are right to appropriate the systematory data whose outcomes specify the supremacy of the suggested IDS model based on FOICA dimensionality reduction.

big intrusion data, cybersecurity, intrusion detection system, independent component analysis, dimensionality reduction, hyper-heuristic firefly algorithm, convolutional neural networks, NSL-KDD

For citation: Aswanzandini R., Despa Ch. Dimensionality reduction of the attributes using fuzzy optimized independent component analysis for a Big Data Intrusion Detection System. Scientific and Sechnical Journal of Information Technologies, Mechanics and Optics, 2022, vol. 22, no. 1, pp. 95-100. doi: 10.17556/2226-1494-2022-22-1-95-100.

УДК 004.048

## Синжение размерности атрибутов с использованием нечетко оптимизированного независимого компонентного анализа для системы обнаружения вторжений в большие данные Раджан Асуанандини<sup>125</sup>, Чандран Дипа<sup>2</sup>

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#### Анпотация

Исследования кибербегопасности больших данных в последние годы стали привлекить большое вин благодаря расработке передовых классификаторов машиниюго и глубового обучания. Новые апторитым классификаторов аначительно улучшили системы обнаружения вторжений. На производительность

C Aswansadini R., Desga Ch., 2022

Научно-тюовический востник информационных технологий, миханики и оптиюх, 2022, том 22, № 1 Scientific and Technical Journal of Information Technologies, Mechanics and Optics, 2022, vol. 22, no 1

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RIACT 2021 IOP Publishing Journal of Physics: Conference Series 2115 (2021) 012035 doi:10.1088/1742-6596/2115/1/012035

### Personalized Drug-Disease prediction using Multiple Linear Regression with ReLU

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Abstract. Predicting models for personalized Drugs related to specific disease are essential, as traditional methods are expensive and time consuming. The most challenging task in personalized medicine is predicting the status of disease from high dimensionality data. In the biomedical domain the association between drugs and disease plays a vital role as the same drug may treat similar diseases. For the good adaptability to complex and nonlinear behaviour data, Multiple Linear Regression method with ReLU Activation function is used for calculation and to fit the model with Drug—Disease dataset. Based on the results the drug or combination of drugs that treat a specific disease is predicted efficiently.

#### 1 Introduction

The discovery of drug is very tedious, expensive and very lengthy process. Even it can take more than an era and hundreds of millions to introduce a new drug and the probability of getting approval for the new drug is very less. Drug repository method becomes popular method to overcome the challenges faced in Traditional methods of drug discovery. Using Drug repository new indications can be discovered for old drugs. Recently, Machine Learning methods are majorly used to identify the interactions of drug-disease potentially. Review sites and social media forum has a huge volume of information about the user preferences and ratings of multiple products based on their experiences. Valuable insights can be obtained by applying approaches like Sentiment Analysis. The review of drugs can be collected with the features like Effectiveness, Side Effects, Benefits, over all Comments. Based on the information Sentiment Analysis can be done, to predict effective drug for any disease. Most of the Sentiment Analysis approaches used lexicons for identifying positive, negative and neutral words. The opinions collected from social media forum would be given in highly informal, ambiguous medical terms. Hence, such information have to be trained using Machine Learning approaches.

Recommendation of drug plays a vital role as millions of individuals are affected due to the wrong prescription of medicines, every year. Combinations of drugs, various drugs used for similar type of diseases may give side effects[10][11]. This problem can be rectified, if personalized drug is recommended based on the revises of people who had used and gave positive rating for the drug. In this work, annotated dataset has been taken for predicting personalized drug for similarity diseases. The dataset has been retrieved from UCI Machine Learning Repository <a href="https://archive.ics.uci.edu/ml/datasets.php">https://archive.ics.uci.edu/ml/datasets.php</a>.

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© 2022 JETIR April 2022, Volume 9, Issue 4

www.jetir.org (ISSN-2349-5162)

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JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

## PSYCHOLOGICAL DISTRESS AMONG THE STUDENTS LOSING REGULAR CLASSES DURING AND BEFORE COVID 19 PANDEMIC

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#### ABSTRACT

COVID - 19 has reshaped many organizations and students' lifestyles. More number learners were affected with Covid 19 and their learning mode has been changed into online mode through Google meet, Zoom meets, etc. This is one of the first factual and unexpected experiences for many educated people. Before the covid pandemic, people and students' lifestyles were smooth and we'll adapt the mode of face-to-face interaction. E-learning was underutilized in the past, especially before the pandemic. Covid 19 pandemic forced the entire world to adapt the learning and teaching in online mode.

Keywords: E-learning, Online education, Unexpected experience, Pandemic, Students lifestyle.

### 1- INTRODUCTION

The phrase 'Education before and after Covid' has a major impact on students of all fields. Education plays a vital role for all people in the nation. The level of education must be stable, constant and must bring forward knowledge to the learners. Like so, we had a choice of learning the education in the times of Covid crises. The development of education has also had either choice in Covid 19, Online mode of educations through apps, internet, webs helps the students to gain the various fields of education. Colleges and Schools facilitate the students in providing valuable education, teaching through google meet, Zoom meets, and other online teaching apps. The student has also made their knowledge wider by also using the internet.

The impact on education through online teaching makes the students addicted to gadgets, and also leads to some health issues. Though they get valuable education online, immoral activities take place too. Many students could not afford to buy mobile phones, and so they are in the situation to go to work. These students are losing their education and are pushed for another source to meet the basic needs of their life. The lockdown situation makes all the teaching institutions move on to the online mode. Though they are in a confusing situation at first, they found the choice online. The opportunities for the educational institution are wider and they could manage the educational level among the students.

The comparison between the education before and after a pandemic is the interaction between the students and the teachers are few, though they have a virtual platform including chats, email – the students are not much active as compared to direct teaching in classrooms. The students use multiple resources to upgrade their knowledge. The impacts of using gadgets are they often get headaches, eye problems and also lead to sleepless nights. In the time of classroom education, students are punctual in their activities like they do their work on

JETIR2204026 Journal of Emerging Technologies and Innovative Research (JETIR) www.jetir.org

### Criterion 3 – Research. **Innovation and Extension**

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

### 3.3.1 / Research Papers Published / Data Template / Row No. 44

Indian Journal of Natural Sciences



www.pisroindia.org.in @LIONS

Vol.12 / Izsue 69 / December / 2021

International Bimonthly (Print)

RESEARCH ARTICLE

ISSN: 0976 - 0997

### Strong 2 - Domination in Intuitionistic Fuzzy Graph

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Accepted: 16 Oct 2021 Revised: 15 Sep 2021 Received: 24 Aug 2021

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### ABSTRACT

In this paper we introduce the concept of strong 2 domination of an Intuitionistic fuzzy graph. We determine the strong 2 – domination number d(G) of the intuitionistic fuzzy graph G is the minimum cardinality taken over all strong 2 - dominating number of an Intuitionistic fuzzy graph and that of its complement are discussed. Also prove some results on strong 2 - dominating set.

Keywords: Intuitionistic fuzzy graph, strong domination, 2-domination, strong 2-domination set, strong 2 – domination number.

#### INTRODUCTION

A. Rosefield introduced the notion of fuzzy graphs and studied fuzzy analogs of graph theoretic concepts such as paths, cycles and connectedness [6]. M.Chelliat and D. Favaron[1] introduced the independence and 2-domination in trees. A. Somasundaram and S. Somasundaram [9] discussed domination in fuzzy graphs. R. Parvathi and G. Thamizhendhi [5] discussed domination in Intuitionistic fuzzy graphs. R. Parvathi and M.G. Karunambigai [3] gave a definition for intuitionistic fuzzy graph as a special case of intuitionistic fuzzy graphs defined by K.T. Atonassov and A. Shannon [8]. In this paper we introduced dominating set, strong domination, 2- domination set, and domination number in Intuitionistic fuzzy graphs.

#### PRELIMINARIES

An intuitionistic fuzzy graph is of the form G = (V, E) where  $V = \{a_1, a_2, ..., a_n\}$  such that  $\mu: v \rightarrow [0, 1]$  and  $y: v \rightarrow [0, 1]$ denote the degree of membership and non membership of the element  $a_i \in V$  respectively and  $0 \le \mu(a_1) + \gamma(a_1) \le 1 - (1)$ 



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### 3.3.1 / Research Papers Published / Data Template / Row No. 45

ICTMIM 2021 IOP Publishing
IOP Conf. Series: Materials Science and Engineering 1126 (2021) 012056 doi:10.1088/1757-899X/1126/1-012056

### Cost Minimization of Turning Machining Process with Materials using Abc, Auction, Ant Lion, Elephant, Spiral, Bacterial, Greedy, Lawlers Fireworks and Pattern Search

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Abstract: The optimization algorithms are used in machining process for improving product quality and minimizing cost and time. The turning machine process is used for cutting speed and feed. This paper describes the optimization of machining process by using the ABC algorithm, Auction, Spiral, Ant lion, Elephant herding, Bacterial colony, Greedy, Lawler's, Fireworks and pattern search for these ten non-traditional methods. In this paper, we have compared the solution to minimize the total cost and time of turning machine process using ten artificial optimization methods. We conclude which method gives a better solution for turning machine process.

Keywords: Turning machine process, Optimization Algorithm, Cost minimization, ABC algorithm, Auction, Ant Ion, Elephant henling, Spiral, Bacterial colony, Greedy, Lawler's, Fireworks and Pattern search.

Introduction: The machine process involves the different ranging from cutting speed, feed, depth of
cut and number of passes to output of production cost, tool life, production time, cutting forces, cutting
temperature and power consumption etc. Selecting particular of cutting condition has a significant impact
on product quality and machining cost. The parameters are Feed (f), Cutting speed (Vc) and Cutting depth
(D).

Optimization machining process condition related to parameter selection problem of multi pass turning (2). The different authors attempted optimization of the same problem using varies methods (3, 4). The hybrid technique based on simulation algorithm and pattern search to minimize the production cost proposed by Chen (5). The optimization based on genetic algorithm approached in optimization technique (6). The pattern search method attract more researcher by solving a complex optimization problem (3). The same model is attempted using hybrid algorithm and genetic algorithm (7).

The above literature review presented, turning machine process is a complex problem to solve various optimization approaches. In this work—pattern search is developed to minimize the unit production cost. The proposed optimization method is highlighted by comparing the obtained results with non - traditional optimization methods.

In this next session, we present objective of the problem to minimize subject to various constraints. In same, we proposed an algorithm is studied and results are presented and compared with other non-traditional optimization methods.

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BITMET 2020 IOP Publishing

Journal of Physics: Conference Series 1947 (2021) 012049 doi:10.1088/1742-6596/1947/1/012049

# A Numerical Study on MHD Mixed Convection in an inclined Lid Driven Enclosure

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Abstract. In this work, MHD mixed convection flow and heat transfer in an inclined lid driven enclosure with different angles (φ=0° to 90°) for two cases has been studied numerically. Simulations are carried out over a range of parameters: Prandtl numbers (Pr=0.7 and 7.2), Hartmann number(0≤Ha≤100), Richardson number (Ri=0.01,1.0,100) and Reynolds number (Re=100). The governing equations are solved by the finite volume method with a SIMPLE algorithm. It has been found that the average Nusselt number decreases with increasing Hartmann number. It is concluded that on increasing the Richardson number, the overall heat transfer is increased. Also, it is found that existence of the magnetic field suppresses the convective heat transfer and fluid flow in enclosure.

#### 1. Introduction

Mixed convection in lid driven enclosures has received considerable attention as it is a complex problem due to shear flow caused by the movement of moving wall and buoyancy induced flow. This type of problem is encountered with engineering applications such as cooling of electronic devices, food processing, heat transfer in solar ponds, material processing and so on. The fluid flow and heat transfer in a rectangular cavity with moving top wall was investigated by Shankar et al. [1]. Heat transfer on joule heating and magnetic field in a lid driven cavity with heated semi circular source on one wall is studied by Rahmann et al. [2] and he found that magnetic field is a good control parameter for heat transfer and fluid flow. Oztop [3] made a numerical study on laminar MHD mixed convection in a lid driven cavity heated by a corner heater. Nasrin [4] investigated the optimality of heat transfer in a horizontal lid driven enclosure with wavy bottom wall for different aspect ratio of cavity. Sajjadi et al. [5] analyzed the mixed convection heat transfer in a two sided lid driven cavity with various Richardson's number and it was found that heat transfer declines with the growth of the magnetic field for two cases. Annunziata et al. [6] investigated the mixed convection in inclined lid driven cavity with heat flux boundary conditions and obtained that heat transfer rate increases as inclination angle increases whereas average Nusselt number decreases with increase of Richardson number, because of stratified field configuration. Recently Roy et al. [7] examined the mixed convection in closed cavity with different direction of moving walls and found that fluid flow is highly influenced by the direction of wall's motion. Most recently, mixed convection inside horizontal (top or bottom) wall sliding lid driven 2D enclosure in which vertical walls are at various boundary conditions has been investigated [8-10]. Very recently, MHD mixed convection inside a trapezoidal enclosure with rotating circular solid cylinder filled with Cu-water nanofluid saturated with a porous media has been numerically examined by Ali et al. [11].

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BITMET 2020 IOP Publishing
Journal of Physics: Conference Series 1947 (2021) 012055 doi:10.1088/1742-6596/1947/1/012055

## Selection Of Best Social Media Using Group Decision With Picture Fuzzy Graphs

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Abstract-In this dissertation, we study the picture fuzzy graph (PFG) in the decisionmaking problem based on picture fuzzy relation and some types of picture fuzzy graphs such as complete picture fuzzy graphs, strong picture fuzzy graphs, complement picture fuzzy graphs are described and also study the Pythagorean fuzzy graph in decision making environment. Further, we present an application of Pythagorean Fuzzy Graphs and Picture Fuzzy Graphs in decision making environment.

Keywords: Pythagorean Fuzzy Graph, Picture Fuzzy Graph, Picture Fuzzy Preference Relation, Picture Fuzzy Weighted Averaging Operator, Picture Fuzzy Weighted Geometric Operator.

#### 1. Introduction

In this paper, we find the best social media for developing the career and studies vice in the current COVID-19 situation using picture fuzzy graphs. In this critical situation, peoples have to consider our safety and develop their business, students also concentrated their studies. In this way, we choose that kind of social media for those peoples. In the previous chapter, we discuss Face book, what's App, and YouTube. Here, we have seen about Google Meet, which is one of the popular Social media also, and is more suitable for studying students business application like webinars and video conferences in the current scenario. With Google Meet, you can host video calls with up to 150 people.

#### 2. Definition

### DEFINITION 1.1:

Let M be a non-empty finite set and  $\delta: M \to [0, 1]$ , let  $\Omega: M \times M \to [0, 1]$  such that  $\Omega(a, b) \le \delta(a) \land \delta(b) \forall a, b \in M \times M$ . The pair  $G = (\delta, \Omega)$  is called a fuzzy graph over the set.

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### 3.3.1 / Research Papers Published / Data Template / Row No. 49

Indian Journal of Natural Sciences



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Vol. 13 / Issue 71 / April / 2022 International Bimonthly (Print)

ISSN: 0976 - 0997 RESEARCH ARTICLE

### On Regular Neutrosophic Fuzzy Matrices

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Received: 17 Feb 2022 Revised: 13 Mar 2022 Accepted: 28 Mar 2022

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#### ABSTRACT

The aim of this paper is introducing the concept of regular Neutrosophic Fuzzy Matrices (NSFM) as a generalization of regular fuzzy matrices. Also, we provide a new representation of Neutrosophic Fuzzy Matrices in terms of its membership, non-membership and indeterminancy fuzzy matrices. Further, the structure of Row space and Column space of an NSFM are obtained. This leads to a characterization of regular NSFM and Invertible NSFM.

Keywords: Fuzzy Matrix, Regular Fuzzy Matrix, Neutrosophic Fuzzy Matrix, Regular Neutrosophic Fuzzy Matrix, Invertible N5FM

MSC Subject Classification: 15B15, 15A09

### INTRODUCTION

The fuzzy set (FS) was introduced by L. Zadeh [12] in 1965, where each element had a degree of membership. The neutrosophic set (NS) was introduced by F. Smarandache [6,9,10] in 1999 where each element had three associated defining functions, namely the membership function (T), the non-membership (F) function and the indeterminacy function (I) defined on the universe of discourse X, the three functions are completely independent. Atanassov has introduced and developed the concept of intuitionistic fuzzy sets as a generalization of fuzzy sets [1,2,8].



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3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

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Indian Journal of Natural Sciences



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RESEARCH ARTICLE

Vol.12 / Issue 70 / February / 2022

International Bimonthly (Print)

ISSN: 0976 - 0997

### A Survey on Various Parameters Influence in Increasing the Lifetime of the Wireless Sensor Networks

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Received: 09 Dec 2021 Revised: 11 Jan 2022 Accepted: 21 Jan 2022

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#### ABSTRACT

Wireless sensor networks with various parameters that influence the lifetime have fascinated the researchers to focus on the increasing its lifetime. Due to their large scope of implementation in various fields which leads to maintenance of the lifetime with various constraints. Here in this paper survey is been done in order to increase the lifetime of the nodes of WSN by concentrating on various stringent parameters. Though the energy management schemes directly influence the lifetime of the WSN, here we are focusing on various algorithms or protocol and the methodology or approach followed with list of parameter remarks which gives the complete information about various parameters which influence the WSN. The parameters include node management, energy balancing, MAC layer, routing policies, transmission policy, device management, load balancing, duty cycling, mobile sink based, cross layer optimization.

Keywords: Node management, Energy balancing, Routing Policy, Transmission Policy, Extending Lifetime.

#### INTRODUCTION

Recently the technological advancement in various WSNs applications like IOTs, cloud computing, military, environment, health, entertainment, transportation, crisis management, smart spaces, and disaster prevention leads to create a great interests among the academicians, researchers, manufacturers and their dients. Normally WSN is a spatially arranged autonomous sensor nodes used in many applications like defence, industry monitoring and health





International Journal of Research in Engineering, Science and Management Volume 4, Issue 9, September 2021

https://www.ijresm.com | ISSN (Online): 2581-5792

Time and Location-Critical Emergency Message Dissemination for Vehicular Ad-Hoc Network

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Abstract. This paper, proposes a time-location critical(TLC) framework for EM dissemination and use V2X Algorithm to achieve the goal. In specific, vehicles near the accident site (or the point-of-interest location) receive guaranteed, detailed messages to take proper reaction immediately (e.g., alow down or change lanes), and vehicle further away have a high probability to be informed and make location-aware decisions accordingly (e.g., detour or reroute), with the assistance of reverse traffic when possible and necessary. The efficacy of the proposed framework is analyzed and validated by extensive numerical and simulation results. The TLC framework and the use of the V2X algorithm are shown to be able to disseminate Ems effectively and efficiently by taking both the time and location criticality into account, while simplifying the design of radio transceivers and media access control protocols for VANET.

Keywords: Vehicles, Modulation, Delay, Read transportation, Encoding, Ad-hac networks, Interference.

#### 1. Introduction

Vehicular Ad-hoc Network(VANET) to considerably increase road safety, travel comfort and traffic control, which is also an important part for future Intelligent Transportation System(ITS). It is expected that ITS will bring hage economic and social impact to our more and more connected lifestyles and activities, by enabling inter-vehicle communications with or without the assistance of roadside infrastructures. When an accident happens or a certain road condition is abserved(POI), the vehicle nearly need detailed information immediately to react properly, due to the short distance to the POI and thus short reaction time. At the same time such information, likely with different levels of detail, needs to be disseminated further to allow following vehicles at different distance to make location-aware decisions accordingly. It is obvious that the time and location critically of EM dissemination should be taken into account at the same time.

#### 2. Element Depiction of the Proposed

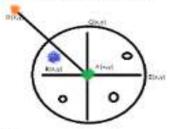
### A. Beacon massage

It is vehicular broadcasting messaging services, which happens periodically to obtain information about neighboring vehicles. These messaging services include position, velocity and direction of vehicle. A table list will be created about neighbouring vehicle and its position and distance with moving direction. Assume that each vehicle can judge whether they are at intersection, it will be capable of broadcasting a beacon message to inform neighbour vehicle.

#### B. Straight Road

In this paper, the greedy forward routing protocol applied to choose the accurate location of the next vehicle. The vehicle takes itself at center co-ordinates of X and Y axis in terms of vector from its destination. The vehicle starts calculating the transmission range of another nodes or destination vehicle.

Our proposed greedy forwarding and GPSR greedy forwarding is that we use the concept of vector to choose the next hop so that the occuracy can be improved.



#### C. Intersection

In our research we assume that the vehicle can judge whether the co-ordinator by beacon message can be shared in the common region of two vehicle communication distance. i.e., If a vehicle 'A' wants to communicate vehicle 'C' which is away from A's communication distance can be reached by an intermediate vehicle 'B' in between A & C. The message from 'A' can delivered through intersecting points of 'B' to intersecting point of 'C'.

### D. Recovery Strategy

The proposed algorithm may to complete the communication for vehicle away from the source vehicle. We adapt V2X, protocol algorithm for communicating vehicle to cloud server.

These technologies can help recover the emergency situation

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429

Volume 9 Issue VI June 2021- Available at www.ijraset.com

## Utilization of Network Layer Protocols for Systematic Routing

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Abstract: A clean framework for designing protocols for wireless networks includes localized routing and broadcasting. The clean framework is based definitely on the ratio of the cost of making certain picks along with cut price in distance count. Routing protocol is one in each of the most important networks found in this application of wireless networks. The normally used routing techniques withinside the network layers are described as follows. In [1]Distributed routing approach each node checks whether or not or now no longer the cost of routing via a given neighbor is smaller than that of currently used nodes. In the 'adhoc' networks, it has bandwidth quandary of the wireless channel. In dynamic ad hoc networks, a localized approach based definitely on 'on-demand direction discovery' with the useful resource of the use of flooding excursion spot is used. But it's a ways inefficient to use flooding as routing scheme in wireless networks as it has power and bandwidth quandary. Localized protocols describes the amount of information required (i.e.) it gives the not unusual place variety of messages transmitted in step with node in a protocol. In a strictly localized protocol it's a ways each local or global in nature. Thus the aim of the challenge describes the concept as a modern framework of some gift protocols. The Proposed framework of the localized routing scheme is based definitely on the cost measure, which is based upon on the assumptions for the minimal routing direction to be determined on and the improvement measure is based upon on the advances towards the excursion spot. Network simulator is used to implement this scenario.

#### I. INTRODUCTION

The routing mission is consider, wherein a message is to be sent from an offer node to an ad hoc wireless network. Way to propagation course loss, the transmission rate are limited. [2]Thus, routes amongst hosts inside the network may what's extra cowl hops through specific hosts within the network. The nodes inside the network are frequently static (e.g. thrown from Associate in Nursing aircraft to a far flung tract or a poisonous environment), static maximum of the time (e.g. books, projectors, furniture) or moving (vehicles, people, little robot devices). Wireless networks of sensors are altogether possibility to be considerably deployed the near future way to the reality they considerably extend our practicality to suggest and control the physical environment from some distance that flung locations and decorate our accuracy of data no inheritable through collaboration among tool nodes and online data technique at those nodes. Networking the ones sensors (empowering them with the capability to coordinate amongst themselves on a far larger sensing mission) can revolutionize data amassing and technique in numerous situations. A wireless network that obtained large hobby in modern-day years is ad hoc network. Mobile ad hoc networks cowl wireless hosts that speak with each specific inside the absence of everyday infrastructure. Some samples of the feasible uses of ad hoc networking encompass soldiers at the battlefield, emergency disaster treatment personnel, and networks of laptops. Captivating qualitative homes [MC] [3] encompass allocated operation, loop-freedom, demand-based more often than not all absolutely operation and sleep duration operation, at equal time as hop dont forget regarding and transport prices are among quantitative metrics. we will be predisposed to shall additionally tough on the ones homes and metrics, for you to wear out the difficulty of routing in wireless networks at equal time as looking to lower the ability consumption and/or lessen the goals on nodes that have considerably depleted batteries.

### II. LOCALIZED ROUTING CONCEPT

In localized routing, nodes make desire on its own, primarily based totally surely at the records to be had the neighbor nodes in addition to the leaving spot node. It has no know-how approximately the alternative nodes. By keep beneath surveillance at the records approximately the friends, it's going to pick out the minimum one and transfer the data through it. Then the node which has acquired the data is act as starting node and follows the technique mentioned above. This development will take vicinity till the data reaches the desired spot. In dynamic [4] adhoc networks, a localized technique primarily based totally surely on as call for path discovery with the aid of using flooding desired spot request packets is appropriate. However, strength and bandwidth limitation, decreased computational talents Wi-Fi channel characteristics (Omni directional antennas and conversation on an man or woman now no longer unusual place channel), and the dynamic nature of Wi-Fi networks require the layout of community layer protocols brilliant a number of in addition homes below a famous localized paradigm.

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THE JOURNAL OF ORIENTAL RESEARCH MADRAS ISSN: 0022-3301 | SEPTEMBER 2021 | 46

### A STUDY ON THE DEMOGRAPHIC PROFILES AND MEASURE THE SAMPLE CONSUMERS' LEVEL OF AWARENESS OF ORGANIC FOOD PRODUCTS IN COIMBATORE DISTRICT OF TAMIL NADU

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#### ABSTRACT:

World population is growing day by day; and a greater demand for food products may rise with the rise in population in the years between 2009 and 2050. The consumption of fast food and processed food has also increased because of changes in lifestyle of the public. The high use of fertilizers and pesticides in the production of crops has a great argument in many studies. Also the awareness of consumption of chemicals in the foods has made the people go in search of alternative foods which are non-toxic in nature. As a result of their search, people have started stretching their hands towards the organic foods.

Received 01 September 2021, Accepted 17 September 2021, Published 30 September 2021 Correspondence Author: Dr.B.Karthikeyan

#### INTRODUCTION

World population is growing day by day; and a greater demand for food products may rise with the rise in population in the years between 2009 and 2050. In the last four decades the population growth was 3.3 billion, which was 90 percent more than the current growth which shows a downward trend in these years. These are the forecast shown in the developing countries. The extreme group of high growth of population is in the sub- Saharan Africa population which shows 11 percent and the slower group is the East and Southeast Asia which shows a growth of per cent. It expected that the urban population will increase by 70 percent in 2050 and the rural population will increase by 49 percent. After reaching a peak, it will gradually decrease.

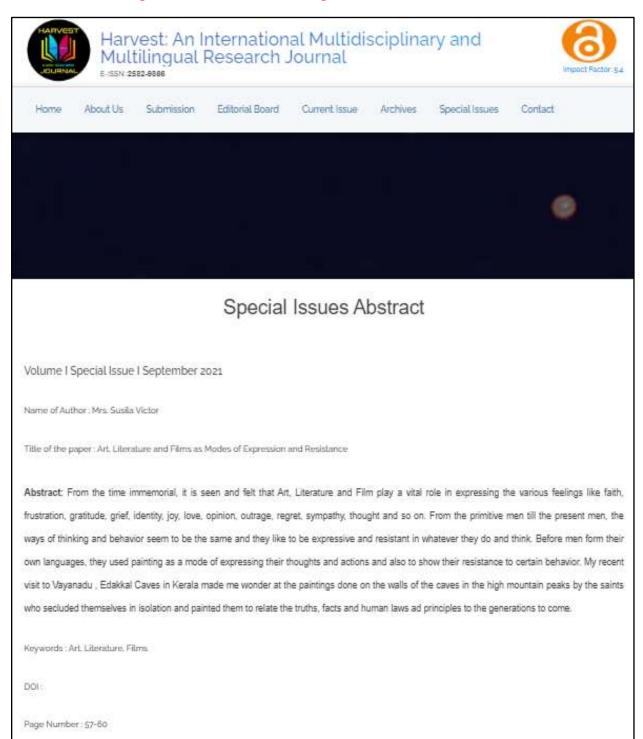
The research and development has given chemical fertilizers to get more yield. It was started by the developed countries, and later it spread all over the world. It fulfills the food products demand and helps to export the same. The consumption of fast food and processed food has also increased because of changes in lifestyle of the public. The high use of fertilizers and pesticides in the production of crops has a great argument in many studies. Also the awareness of consumption of chemicals in the foods has made the people go in search of alternative foods which are non-toxic in nature. As a result of their search, people have started stretching their hands towards the organic foods.

#### AWARENESS OF ORGANIC FOOD PRODUCTS

There has always been unending discussions on the health issues of fertilizer food and awareness of organic food products, and the large number of people who take interest in organically produced food as well as their possible effects on human beings and the environment. These discussions and the following measures to be taken are essential in determining the purchase intention of consumers on organic foods. In recent years, the global demand for organic food is growing and sales of organic foods are in surplus of five billion US dollars a year. Due to the fast increasing population and drastic changes in the economic development the Asian region has become an important producer and exporter of organic foods. Organic foods are creating attention in many developing and developed countries as they

Margareta Wandel and AnnechenBugge, (1997) "Environmental concern in consumer evaluation of food quality", Food Quality and Preference, Volume 8, Issue 1, pp. 19-26.

Willer, H and Klicher, L, (2009) "The world of Organic Agriculture: Statistics and Emerging Trends 2009", IFOAM, FiBL, ITC, Bonn, Geneva, pp. 319-330.



## An Eco-Friendly Synthesis of Barium Strontium Titanate Nanoparticles: Investigation on Tin Doping on Structural and Optical Properties

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Abstract: This article reports a simple and green synthesis employed solid state reaction method was used to prepare the Perovskite-type pure and tin doped barium strontium titanate (BaSrSnTiO3) nanoparticles with Moringa oleifera leaf extract as capping agent. BST and BSST nanoparticles were characterized by XRD, SEM with EDAX, FTIR, UV, PSA and EIS techniques. The structural, morphological, optical and electrical behaviours of BST and BSST nanoparticles are elaborately discussed. The development of a single-phasic cubic perovskite structure with no impurity phases BST and BSST nanoparticles is revealed by XRD study. The formation of perovskite structure was demonstrated by an observable band in lower frequency ranges in an FTIR analysis. The crystallite size was determined using Debye Scherrer analysis. The findings show that the green synthesis of BST has strong crystalline, optical, and electrical properties, and that these properties can be tailored using tin doping with BST.

Keywords: Green synthesis; BST; tin doping; Optical and electrical properties

### INTRODUCTION

The Barium titanate (BaTiO<sub>3</sub>) and Calcium titanate (CaTiO<sub>3</sub>) are the basic perovskite materials [1]. Because of its naturally occurring excellent dielectric and ferroelectric properties, BaTiO<sub>3</sub> is the most widely used material among the basic perovskite materials for various applications such as capacitors, opto-electrical devices, DRAM devices, MOSFET, energy conversion and storage [2-6]. Nowadays researchers are mainly focusing on to improve and tune the physico-chemical properties for enhancing the efficiency of BaTiO<sub>3</sub> perovskite material in energy storage and conversion applications [7]. Changing and modifying the synthesis procedures, doping the various metal oxides in either A-site or B-site, thermal treatments are the important research attempts taken to tune perovskite materials property for enhancing efficiencies in energy related applications [8]. Barium strontium titanate (BST) is one the B-site modified BaTiO<sub>3</sub> and used for various applications with improved structural, optical and electrical properties than BaTiO<sub>3</sub>. The solid-state reaction process, which requires additional chemical supports along with starting precursors, extreme temperature, pressure, and pH

International Conference on Advances in Materials, Computing and Communication Technologies AIP Conf. Proc. 2385, 020003-1-020003-10; https://doi.org/10.1063/5.0070921 Published by AIP Publishing, 978-0-7354-4161-3/\$30.00

020003-1

### Criterion 3 – Research, Innovation and Extension

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

### 3.3.1 / Research Papers Published / Data Template / Row No. 56

Indian Journal of Natural Sciences



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Vol.12 / Issue 67 / August / 2021

International Bimonthly (Print)

ISSN: 0976 - 0997

#### RESEARCH ARTICLE

### An Optimized Algorithm to Detect Diabetic Retinopathy and Cardiovascular Disease in Early Stages using Artificial Intelligence

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Received: 15 May 2021 Revised: 29 May 2021 Accepted: 10 June 2021

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#### ABSTRACT

An optimized algorithm is designed and implemented that detects diabetic retinopathy, cardiovascular disease in early stages for clinical management. Scanned images of retina are used to process the images for recognizing the patterns of diabetic retinopathy and cardiovascular diseases. An algorithm is designed with Artificial Intelligence and Particle Swarm Optimization for better accuracy and prediction.

Keywords: unsupervised algorithms, artificial intelligence clusters, machine learning

#### INTRODUCTION

Artificial Intelligence (AI) simulates the human mind where, the intelligence is trained to the machines by observing or processing the data. It adapts the cognitive abilities of the human mind and also process numerous amount of big data and predicts for the accurate diagnosts. Particle Swarm Optimisation (PSO) is an optimization algorithm to find best solutions where computational procedure to select effective and best element from collection of accessible alternatives. Computations are done iteratively and calculated for the normalized mutual data with metrics, similarity indexes, and evolutionary techniques. Every individual element or data is considered as particle and ability to store information as memory and remember previous points to optimize the accurate solutions from lists of computations. Feasible solutions can be computed through the real valued multidimensional data and the values of each particle. Artificial Intelligence processes these computational elements and finds out the prediction of particle through various iterations. PSO is an Artificial Intelligence technique to employ various iterations through computation and finds out the accurate data for predicting the constraints provided in the algorithm. Of all the behavior of the natural systems PSO is one of the Artificial Techniques in closest with genetic algorithms. Using Artificial Intelligence an evolving technology with numerous computing to perform pattern recognition based on the



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### International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

### Design and Development of Voice Controlled Automatic Wheel Chair

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#### ABSTRACT

The voice controlled automatic wheelchair is mainly constructed for the people who are disabled and non-locomotive by their nature. Usually the disabled persons depend on some other for their daily life activities and for their routine works. This may reduce the self-confidence in those persons. As the solution of all these problems the production of wheelchair is aroused. The voice controlled automatic wheelchair includes the Bluetooth module (BC-05) which is connected with the mobile phone of the wheelchair user. The paired Bluetooth and the voice-controlled application which includes the google voice assistant for recognizing the users voice are the main components of the voice controlled automatic wheelchair. The wheels of the wheelchair move according to the voice command of the wheelchair user. The motors connected to the wheels helps in the motors of the wheelchair. The Ardeino Uno microcontroller is used in where the DC motors are connected to it. The DC motor consists of motor? helps in the motion of the wheels.

Keywords: Arduino uno, Bluetooth module (HC-05), DC motors, Android app

### I. INTRODUCTION

The voice controlled automatic wheelefair is a result of enhancement in technology. The voice-controlled wheelchair is designed mainly for the people who are disabled or non-locamotive or paralyzed. The main objective of the VOICE CONTROLLED AUTOMATIC WHEEL CHARR is to control the wheelchair by using speech recognition module. This system is designed to control a wheelchair by using the voice of gerson. The goal of this system will allow certain people to live a life with less dependence on others for their movement as a daily need. The objective of this project is to facilitate the movement of the elderly people who are not able to move well. The goal of this system will allow certain people to live a life with less dependence on others for their movement as a daily need. Speech recognition technology which will grovide a new way of human interaction with machine or tools. This can be realized and optimized with use the sourt phone as an intermediary or interface. In this project interfaces had been designed therefore to develop a program for recognite speech also controls the movement of chair and an application which can handle or manage the graphical commands. This project uses Arduino his microcontroller circuit and DC motors to create the movement of wheelchair. Based on the human voice as an input there are five basic commands given to the wheelchair by the user 1) start, 2)Turn right, 3)Turn left, 4)Turn around, 5)stap.

### II. BASIC CONCEPTS

Speech recognition technology is a key technology which will provide a new way of human interaction with machine or tools. Therefore the problems that they face can be solved by using speech recognition technology for the movement of wheel chair. This can be realized and optimized with use the smart phone device as an intermediary or interface. In this project interfaces has been designed therefore to develop a program for recognize speech also controls the movement of chair and an application which can hardle or manage the graphical commands. This project uses Arduino kit Microcontroller circuit and DC motors to create the movement of wheel chair and Ultrasonic Sensors to detect the hardles in between

Journal of Huazhong University of Science and Technology

ISSN-1671-4512

## Impact of Demographic Variables on Mental Health Perception: Academic Professionals

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#### Abstract

Mental Health of an employee indicates individuals' emotional, psychological, and social wellbeing. It affects how individuals think, feel, and act. It also helps to determine how they handle stress, relate to others, and make choices. In this context, the present study aims to examine the relationship between socio-economic variables and perception on mental health. The sample of the study consists of 539 faculty members working in private engineering colleges in Coimbatore District. ANOVA and Post Hoc Test has been applied to examine this relationship. Findings of the study suggest that age, marital status and experience are most important variables which significantly influence perception on Mental Health.

Keywords: Mental Health, Perception, Socio-Economic variables, Academic Professionals

#### Introduction

Today, the higher education system especially, technical education in India has experienced remarkable structural changes with the establishment of new private universities and the entry of foreign universities which have raised the quality education on par with global standards. Apart from this structural change, the tremendous advancement in technology particularly, the development of ICT has transformed the nature of delivery systems in higher education. All these changes portray the complications in academic work in an ever more demanding environment.

All the changes discussed above depict the complications in academic work in an ever more demanding environment. This has contributed to the escalating stress and conflict. This in turn leads to significant increase in stress related health problems. Even relatively low level of health problems will affect organizational effectiveness and employees' performance. A study regarding job-related stress across 26 occupations reported that teachers suffer from psychological well-being, physical health, and job satisfaction (1). However, institutions of higher education are not showing their interest to human resource concerns. Hence, it is important to know the relationship between socio-economic variables and faculty members' perception on Mental Health.

#### Mental Health

In recent years the employee well-being at work place has enticed growing interest as the modern world places inordinate load on those in the work force. This has led to a negative consequence on the health and wellbeing of workers. As the core competence of any organization is the actual performance of their human resources, the modern age companies need to be built around human resources. To be able to remain sustainable, it is inevitable that promoting the well-being of its employees is a crucial aspect to enhance performance. It is sure that rather low level of health problems will affect the organizational effectiveness and performance of their employees. Hence, to be competitive, organizations must focus on their employees' overall physical and mental health.

In today's globalized business environment, the maximum part of employees' lives is spent at workplaces. It is mandatory that workers are to perform multiple tasks, persistently learn new skills and self-manage in order to meet the competitive demands of the modern job. An individual's mental and physical health can be significantly impacted by the work which may be detrimental or enhancing (2). Mental and emotional health problems of employees will lead to employee absenteeism and decreased productivity. Employers may be improving productivity in the workplace by promoting the mental health of their human resources. It is clear that the work environment plays critical role in the employee well-being, particularly, the mental health.

vol 50 1 issue 3

### Criterion 3 – Research. **Innovation and Extension**

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

### 3.3.1 / Research Papers Published / Data Template / Row No. 59

Indian Journal of Natural Sciences



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Vol.12 / Issue 66 / June / 2021

International Bimonthly

RESEARCH ARTICLE

ISSN: 0976 - 0997

### Implementation of Format Preserving Encryption using AES with GCM Mode

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Received: 01 May 2021 Revised: 05 May 2021 Accepted: 11 May 2021

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### ABSTRACT

All over the world there are 7.53 billion people, 4.66 billion of them are active Internet users. Large amount of sensitive data is handled through internet. Most of the sensitive data are structured data types which should be encrypted. While using traditional database encryption algorithms, the length and format of the structured data is changed. The original field on the table and the encrypted field are different in size, format and data type. Especially the traditional encryption algorithms are not suitable for the field which is used as an index field. It leads to some additional work to handle the encrypted field. Format Preserving Encryption or Data type Preserving Encryption is special type of encryption in which the original and encrypted field are same in data type and format. After encryption, the encrypted filed is never changed. The format and data type are same as original filed. In this paper I proposed a special type of encryption that is AES based Format Preserving Encryption for structured data types on cloud.

Keywords: Cloud security, Cryptography, Format Preserving Encryption, AES based FPE, Security for structured data types.

#### INTRODUCTION

Format Preserving Encryption is a new technique for encryption structured data such as credit card number, social security number Bank account number etc. The database is the main resource provided by the cloud. It consists of both structured and unstructured data.



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International Journal of Research in Engineering, Science and Management Volume 4, Issue 4, April 2021

https://www.ijresm.com | ISSN (Online): 2581-5792

## Implementation of Machine Learning in Higher Education

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Abstract: Machine Learning (ML) is one in every of the fastest emerging technologies today. It is a sub-set of computing technology. Machine learning is employed to show machines the way to handle the information more efficiently. It's a scientific study of statistical models and algorithms to assist a computer system to accomplish designated tasks efficiently and independently by relying solely on inferences and patterns extracted from the training or acquired data [1]. The aim of this paper is to provide the probabilities of applying and using machine learning within the education area. This paper identifies and analyses suitable literature, research papers and articles so as to see their categorization within the field of education, to see this trends of using machine learning in education, and to see its current and future applications.

Keywords: Education, Machine learning, Algorithms, Student performance, Student retention.

#### 1. Introduction

Machine learning may be considered part of computing (AI). Machine learning is, at its core, the method of granting a machine or model access to data and letting it learn for itself. In 1959, Arthur Samuel came up with the brilliant concept that we should always not need to teach computers, but rather, we could allow them to learn their own.

He coined the term "machine learning" to explain his theory, which is now a regular definition for the flexibility of computers to be told autonomously [2]. Pattern recognition, education, computer vision, bioinformatics, natural language processing, etc. are just a few of fields where machine learning is applied.

The best way to describe the potential of machine learning is to explore how people and corporations are currently taking advantage of it. Some examples could be:

#### A. Natural language processing

Google Translate is created from a bunch of machine learning algorithms that updates the service over time supported input from users, like new words and syntax. Siri, Alexa, Cortana, and, last, Google Assistant all rely upon natural language processing to acknowledge speech and synthesis, allowing them to grasp or pronounce words they have never encountered before.

#### B. Healthcare

Al increases the flexibleness for healthcare professionals to raised understand the day-to-day patterns and desires of the people they be sure of, and therewith understanding they're ready to provide better feedback, guidance and support for staying healthy, variety of the ML algorithms utilized in health care application are cardiopathy Diagnosis, Predicting Diabetes, Cancer Detection and Prediction, Robotic Surgery, Smart Electronic Health Recorder.

#### C. Trading

Machine Learning is one step above Algorithmic trading. The Algorithmic trading involves feeding the buy/sell rules to the computer. The financiers cannot predict all of that behavior, machine learning algorithms can - and that they answer changes within the market much faster than human.

#### D. Online shopping

Everything that is recommended to you depends on your search activity. The e-shopping websites deliver recommendations across platforms, devices, and apps. Machines match buyers with sellers and their products, digital content with viewers who want to figure out them - all of which improves our online experiences significantly.

### 2. Machine Learning Algorithms in Education Area

#### A. Supervised Learning Algorithm

Supervised learning is that the task of inferring a function from labeled training data. It involves supervision of human or developer. Although the system records the past operations of the students, still the programmer/teacher must train the system with new sets of information to be prepared for the subsequent level of prediction of students and will make modifications within the preferences, to teach the system for brand new possibilities of problems which students might face, the scholars are given suggested reading/study which is to guide the realm during which they need to reinforce.

### B. Unsupervised Learning Algorithm

Unsupervised learning models are used once we only have the input variables (X) and no corresponding output variables. They use unlabeled training data to model the underlying structure of the data. This approach doesn't involve any data

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## Knowledge Discovery from Tumor Volume Using Adaptive Neuro Fuzzy Inference System Rules

V. V. Gomathi, S. Karthikeyan & R. Madhu Sairam

Conference paper | First Online: 26 July 2021

258 Accesses

Part of the Communications in Computer and Information Science book series (CCIS,volume 1435)

#### Abstract

The primary difficult in medical fields is the mining of understandable information from medical analysis data. The growing of medical data has made labour-intensive analysis, a tiresome job and sometimes not possible by medical experts. Many unknown and hypothetically valuable associations are not be recognized by the expert. The massive development of images necessitates a programmed manner to excerpt valuable information. The data mining or Knowledge Discovery Databases is main promising approach to solve this problem. Fruitful and interesting information can be mined and the discovered information can be used in the associated domain to improve the working level and to increase the feature of decision making through data mining. A significant task in knowledge discovery is to mine intelligible classification rules from the data. These rules are mainly informative for medical issues which are tremendously useful especially in the application of medical diagnosis. Automatic extraction of hidden information from images is a challenging task. The field of automated diagnostic systems performs an important part in the present technological revolution of computerized fully automated trend of living. The main aim of this research work is to extract tumor stage information. In this research, presents a method for extricating phases of cancer via Adaptive Neuro-Fuzzy Inference System (ANFIS), it has been given a more precise result than other methods. ANFIS is exhibited as a diagnostic tool to aid medical experts in the identification of tumor stages.

## **DESIGN ENGINEERING**

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## Role if lot in Smart Agriculture

Mr. M. Arun Prasad, Mr. M. Senthil Kumar

Keywords: Smart Agriculture, IoT, New Technology, Precision Farming, Intelligent Agriculture.

### **ABSTRACT**

IoT smart farming solutions is a system that is built for monitoring the crop field with the help of sensors (light, humidity, temperature, soil moisture, crop health, etc.) and automating the irrigation system. The farmers can monitor the field conditions from anywhere. There is a massive lack of food in the increasing population. Therefore, farmers and agricultural firms are shifting towards new technologies to provide precision, time savings, cost efficiency and reduced human intervention to meet this demand and achieve high productivity. A movement for intelligent agriculture is one of the strategies called IoT. This is the array of equipment that moves data across networks, sensors and computer systems. With less hard labor it may play a major role in rising crop production. This article discusses the use of IoT in various agriculture sectors.



Articles

Vol. 5 Special Issue 1 August 2021 E-ISSN: 2456-5571

#### THE INVASION OF WESTERN CULTURE IN THINGS FALL APART

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#### Abstract

Things Fall Apart is the first novel of an African Writer Chinua Achebe. Here Achebe talks about the Nigerian Ibo Culture through the nine people of Umuofia, their food habit, worship, festivals etc., Okonkwo protagonist of the novel was not accepting the western culture, wants to defeat over the western civilization.

Keywords: Yams, Kola, Oracle, Bravery, Title, Exile, etc.,

#### Introduction

The novel Things Fall Apart written by African writer Chinua Achebe, the novel has been published in the year 1958. The setting of this novel was the last two decade of Nineteenth Century Nigeria. Nigeria was the last colonized African region. The people of Nigeria have followed Ibo culture for more than thirteen thousand years. How the Ibo cultured people are accepted the British Missionary and western civilized way of living are briefly analyzed by the author Chinua Achebe in this novel Things Fall Apart.

### **Umuofian Culture**

Umuofia was the central place for nine villages. Umuofian had the traditional practice that a young man has to achieve through his bravery and possess a title. Okonkwo protagonist of the novel attained a title through defeating the great wrestler Amalinze. "Amalinze was the great wrestler who for seven years was unbeaten, from Umuofia to Mbaino" (Things Fall Apart 3) each houses in Umuofia had a barn in which they filled the Yams. Yams were kind of paddy, wheat and rice for cultivation. Yams were primary food for Umuofian. Okonkwo borrowed Yams for cultivation, he own agricultural lands, Okonkwo's father Unoka

borrowed huge money and who didn't repay the loan then he died, even Unoka didn't attain any title. "Unoka died he had taken no title at all and he was heavily in debt" (Page. 7) There was always war between one of the two villages in Umuofia. In one night town-crier passed an announcement that all nine village people have to assemble in the market place of Umuofia, in the next day everyone have assembled in the market place. Mbaino another central place of nine villages, where Umuofian daughter called Ezeugo, paid a visit in the market, she was the wife of Ogbuefi Udo, have been killed by the clans of Mbaino for this problem both people of Umuofian and Mbaino have assembled in Umuofian market place. "Those sons of wild animals have dared to murder a daughter of Umuofia" (Page. 11) in the meeting, the village leaders have decided to solve this problem offering one young women and one young male The young woman goes child to Umuofia. along with one of the clans' of Umuofia and young boy called Ikemefuna comes along with Okonkwo. Okonkwo leads a sophisticated life, he wanted to repay the loan have been borrowed by his father Unoka.

Bodhi International Journal of Research in Humanities, Arts and Science

© 2021 IJRAR July 2021, Volume 8, Issue 3

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

## WOMEN'S IDENTITY IN THE JOY OF MOTHERHOOD AND PURPLE HIBISCUS

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Abstract

Gender politics issues have been assuming a noteworthy part in Africa since the pre-pioneer period and it saw a sceptical acceleration in sex personalities even in provincial South Africa. Distinctive generational ladies creators took the undertaking of changing the contorted resemblance of ladies as "peasants" by inspiring sex separations that endeavour to plan ladies as underestimated people. Projecting of ladies in chauvinist parts of girls, spouses, and moms by African male initiation and protecting the job of ladies as accommodating to standards and customs, a male grant made male persona as the subject of the story while consigning ladies and kids as submissive and ward. This exploration paper would try to dissect ladies creators not as the perpetrators however the makers of female subjectivity by testing male-produced pairs and male-centric morals. Present work would inspect the books of two Nigerian ladies writers, Buchi Emecheta and Chimamanda Ngozi Adichie through cautious contextualization. Prezent paper would likewise research and contribute in the relative investigation of their works taking the excursion towards self-sufficiency and self-ID of ladies air. The paper as such would submit itself towards the idea of "African Womanism" and Womanist allure of female self-rule and individual satisfaction. Subsequently, the exploration paper would utilize Chikwenye Okonjo Ogunyemi's concept of "African Womanism" as an accommodationist "humanistic women's liberation". Books, with varying Womanist desires, would be investigated inside this structure of Womanist hypothesis and would look to remark on the responsibility of the two Nigerian Womanist journalists to uncover whether the female characters discover a voice for themselves or neglect to express as independent capricious substance.

Keywords: Women identity, African women, Identity crisis,

IJRAR21C1232 International Journal of Research and Analytical Reviews (URAR) www.irar.org 758

International Journal of Application or Innovation in Engineering & Management (IJAIEM)

Web Site: www.ijaiem.org Email: editor@ijaiem.org

Volume 11, Issue 5, May 2022

ISSN 2319 - 4847

## Efficient Load Balancing And Optimal Resource Allocation Using Max-Min Heuristic Approach And Hybrid Optimization Algorithm Over Grid Computing

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#### ABSTRACT

Grid computing is hailed the futuristic computing revolution for business applications and big scale grids are complicated. systems, which contains many thousands of elements that belong to different fields. It is a massive challenging task to plan the facilities so that quality of service (QoS) can be ensured in these environments. It is a distributed high performance computing principle, which provides different kinds of resources (such as computing, storage, communication) to resourceoriented user functions. The scheduling of these jobs are performed for the allocation of the Grid resources available with efficiency to attain improved system throughput and to fulfill the user needs. The problem of task scheduling has emerged to become complicated with the exponential increase in the Grid systemsize. In the available system, there is no guarantee ofload balancing and in some scenarios, there is a reduction in the process speed owing to convergence problems. Therefore, there is a considerable degradation in the overall grid computing performance. In order to get over the above stated problems, in this research work, Max-Min Heuristic (MMH) and Improved Ant Colony Optimization (IACO) algorithm is introduced to bring an improvement in the load balancing besides optimally allocating the resources on grid. The proposed system encompasses important stages referred as system model, load balancing, resource allocation and path and node-level fault resistance. At first, the number of resources, number of tasks, Virtual Machine (VM) and number of grid users over the grid computing are taken into consideration. In this research work, load balancing is performed with the help of MMH algorithm which is helpful inbalancing the entire workload over grid. Load balancing is attained by reassigning tasks from over-loaded nodes to under-loaded nodes. Next, the resources are allocated with the help of IACO algorithm and it is utilized for choosing increasingly optimal resources with efficiency. It also highlights on limiting the cost complexity and improving the VM performance in grid. The fault resistance is achieved with the help of Fit First (FF) heuristic algorithmthat decreases the failure periods and improves the data transfer time. Grid performance is also improved through the idle time reduction of the resources and equal distribution of the unmapped tasks among the existing resources. It can be concluded from the simulation result that the proposed IACO+FF algorithm yields improved performance in terms of improved accuracy, reduced error rate, cost and time overhead compared to the available algorithms

Keywords: Grid computing, Max-Min Heuristic (MMH), Improved Ant Colony Optimization (IACO) algorithm, load balancing, resource allocation, fault tolerance, Fit First (FF) heuristic algorithm

Volume 11, Issue 5, May 2022

© March 2022| IJIRT | Volume 8 Issue 10 | ISSN: 2349-6002

## Enhanced Bat Optimization Algorithm and Low Latency Fault Tolerance Model for Efficient Resource Allocation in Grid Computing

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Abstract - Effectual allocation of resources with fault tolerance is one of the important targets in any computational grid environment to accomplish the task execution on time. In the existing system, computational complexity and error rates are still an issue. Also the requirements and grid services are not satisfied effectively. Hence, the overall grid computing performance is reduced prominently. To overcome the above mentioned issues, in this work, Enhanced Bat Optimization (EBO) algorithm and Low Latency Fault Tolerance (LLFT) model is proposed to improve the optimal resource allocation and fault tolerance over grid computing environment. The proposed system includes main phases are such as system model, load balancing, resource allocation and fault tolerance system. Initially, consider the number of resources, number of tasks, Virtual Machine (VM) and number of grid users over the grid computing. In this work, load balancing is done by using MMH algorithm which is used to equalize the total workloads over grid. Load balancing is achieved by transferring tasks from over-loaded nodes to underloaded nodes. Then the resource allocation is done by using EBO algorithm which is used to select more optimal resources effectively. The best fitness values are used to choose the available optimal resources. The fault tolerance is performed using LLFT which provides fault tolerance for distributed applications deployed within a grid computing using the leader/follower replication. The simulation result concludes that the proposed EBO+LLFT algorithm provides better performance by means of higher accuracy, lower error rate, cost complexity and time complexity than the existing algorithms.

Index Terms - Grid computing, Max-Min Heuristic (MMH), Enhanced Bat Optimization (EBO) algorithm, load balancing, resource allocation, fault tolerance, Low Latency Fault Tolerance (LLFT) model.

LINTRODUCTION

Grid computing, in which a network of computers is integrated to create a very fast virtual computer, is becoming ever more prevalent. It is the future computing paradigm for enterprise applications. Large scale grids are complex systems, composed of thousands of components belonging to disjoined domains. Planning the capacity to guarantee Quality of Service (QoS) in these environments is a challenge because global Service Level Agreements (SLA) depends on local SLAs, i.e., SLAs established with components that make up the grid. These components are generally autonomous and join the grid as part of a loose federation. Only if all these partial SLAs are satisfied, the global SLA will be satisfied [1].

Grid computing can be used to solve problems related with computation intensive applications related with different areas. Ecommerce applications can also benefit from grid computing in the form of faster decision making and accurate forecasting. Grid computing permits researchers to use the grid resources spread across the world to solve problems related to the earth observation, marine, and environmental sciences [2]. In the field of medical sciences, grid computing can give benefits in the form of decision making at remote sites. Specialized practitioners with their expertise can take decisions based on computing intensive operations and analysis through grid computing resources. In the field of bioinformatics, the day by day need of grid computing is growing as the distributed information related to bio-informatics is increasing [3].

Due to uneven job arrival patterns and unequal computing capabilities, some nodes may be overloaded while others may be under-utilized. Load balancing mechanism aims to equally spread the load on each node of the grid, optimizing their utilization,

IJIRT 154086

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY

Turkish Journal of Computer and Mathematics Education Vol. 12 Na. 7 (2021), 1777-1782 Research Article Intuitionistic Fuzzy Ideals of Mrgroups in Near Rings as Maximal Product of Graphs S K Mala<sup>1</sup>, M M Shanmugapriya<sup>2</sup>, S Santhosh Kumur<sup>3</sup> Assistant Professor of Mathematics, KG College of Arts and Science, Tamil Nadu - 641035 1, India. & Research Scholar in Mathematics, Karpagam Academy of Higher Education, Coimbatere. mala.sk/ir/kgcas.com <sup>2</sup>Profesor in Mathematics, Karpagam Academy of Higher Education , Coimbatore -641021, priya.mirdu@gmail.com Assistant Professor of Mathematics, Sri Ramakrishna Mission Vidyalaya. College of Arts and Science, Coimbutore = 6.41020. fuzzysansem yeas/agmai Leon Article History: Received: 11 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 16 April 2021 Abstract: This paper explains about the degree of the vertices in the Maximal product of graphs which represents the IF Idea's of MT groups in Near rings. It also describes various theorems about the characteristics of the vertices in calculating the degrees with an example Keywords: IF Ideals of M/Igroups in Near rings, Maximal product of graphs, Degrees of vertices in Maximal product of graphs In 1983, G. Pilz [11] introduced and explained the concept of Near rings. After the introduction of Fuzzy set by Zadeh L.A[15], many extended the algebraic concept of Near rings to Fuzzy Near rings. In 1996, S. D. KIM &H. S. KIM [4] extended Fuzzy Ideals of Neur rings and also explained their surious characteristics by theorems.K. T. Atanassov [1], in 1986 extended Fuzzy sets to IF sets by introducing IF sets. Later A.Jianming et al[2] discussed about IF ideals in near rings in 2005, M.G.Karunambigai et al[6] in 2012, explained various properties of IF graphs with its properties.S.K.Mala et al [7]described IF ideals of MFgroups in Near rings in 2018 and later represented them as graph by S.K. Mala et al[8] by explaining its properties in 2019. in 2019, M. Situra et al [10] introduced Fuzzy graph structures with applications in detail . The maximal product of graphs of IF Ideals of Margroups in Nearring's has been discussed by S.K.Mala et al [9] in 2020. 2. Preliminaries Definition: 2.1 Near ring is a non-empty set with two binary operation satisfying L Group with respective to first operation Semi group with respect to second operation Second operation is distributive over the first operation. Definition: 2.2 Fuzzy set is a crisp set with its elements having membership function. If they have non-membership value along with it satisfying the condition that their sum lies between 0 and 1, is called as an Intuitionistic Fuzzy set. Definition: 2.3 A Fuzzy set in a neur-ring R is called a fuzzy ideal of R if it satisfies: (i)  $\mu(x - y) \ge \min\{\mu(x), \mu(y)\}$  $(ii)\mu(y+x-y) \ge \mu(x)$ iii)  $\mu(xy) \ge \mu(y)$ ix  $\mu$  ((x + z)y - xy)  $\geq \mu$ (z) for all x, y, z  $\in$  R. Definition: 2.4 An IF set A of a Near ring is said to be Intuitionistic fuzzy ring if it obeys (i)  $\mu_A(x - y) > Min \{\mu_A(x), \mu_A(y)\}$ (ii) μ<sub>A</sub> (xy) > Min (μ<sub>A</sub> (x), μ<sub>A</sub> (y) (iii)  $\gamma_A(x-y) < Max. \{\gamma_A(x), \gamma_A(y)\}$ (iv)  $\gamma_A(xy) \le \text{Max} \{\gamma_A(x), \gamma_A(y)\}$ , for all x, y in near ring Definition: 2.5 Let  $GI_{\ell}(V_{1h}, E_{1h}, \mu_B, \gamma_L)$  and  $GI_{2}(V_{12}, E_{12}, \mu_D, \gamma_L)$  be 2 graphs of intuitionistic fuzzy ideals of M'group in near rings (IFIM/GNR)  $I_1$  and  $I_2$  then  $GI_1 \bullet GI_2 = (V_1, E_h, \mu_h, \gamma_L)$  is called maximal product graph of intuition istic fuzzy ideal of MI group in near rings with structure vertices -

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 $V_1 = V_0 + V_{12}$  and, edges  $-E_1 = \{((u_1, v_1), (u_2, v_2)) / u_1 = u_2 \text{ and } v_1, v_2 \in E12 \text{ (or)} \}$ 

v<sub>1</sub>=v<sub>2</sub> and u<sub>1</sub>, u<sub>2</sub> c E<sub>11</sub>!