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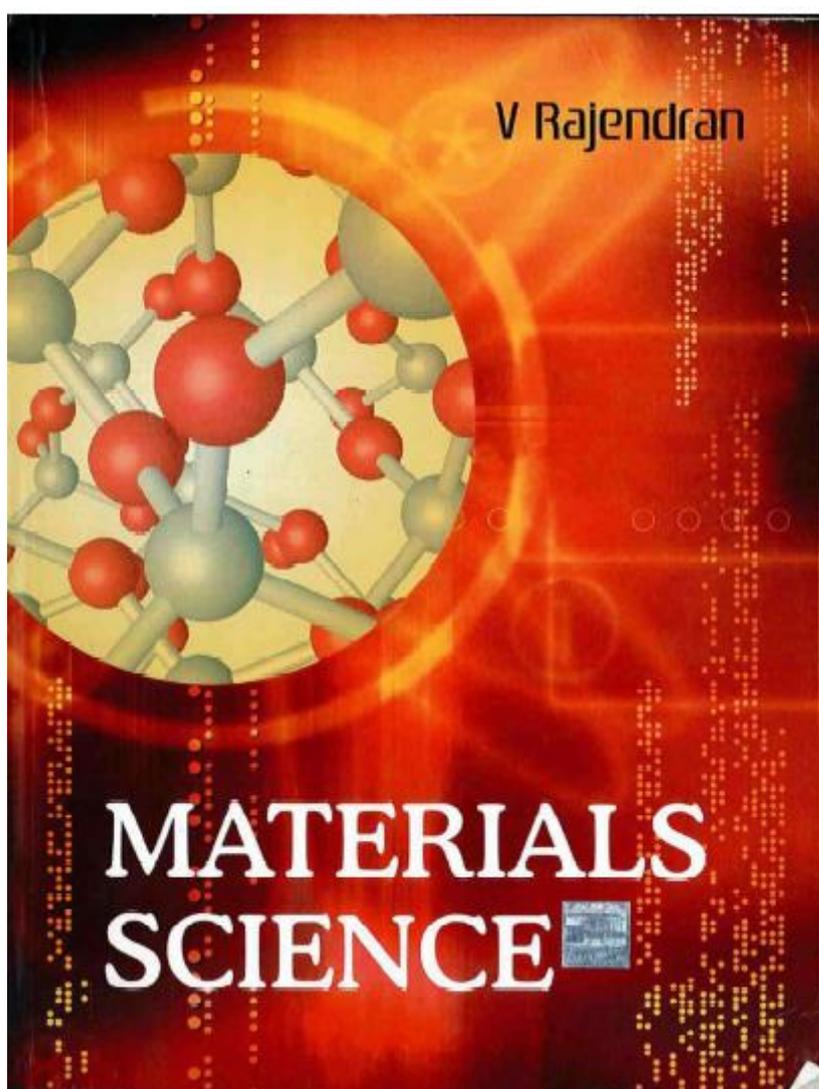
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AY 2019–20: Books and chapters in edited volumes / books published, and papers in national/international conference-proceedings

Books

1. V. Rajendran



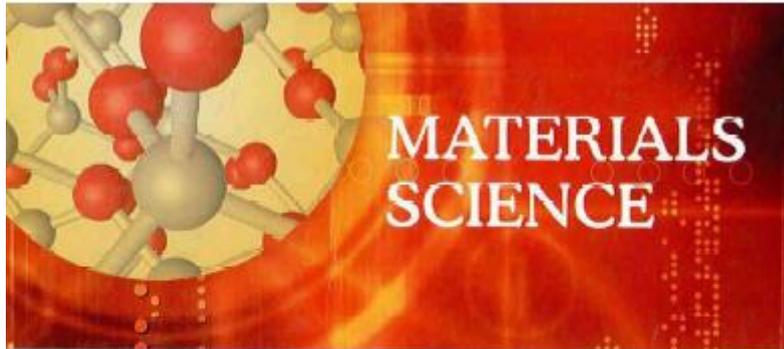


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The book is designed to provide a good understanding of the basics of materials, in terms of their structural, optical, electrical, magnetic and mechanical properties. One of the major highlights of the book is the inclusion of nanophase materials, shape memory alloys, ceramics, polymers, and biocompatible materials.

Salient Features

- Detailed coverage of Modern Engineering Materials: Biomaterials, Advance Ceramics, Polymers, Composites, Nonlinear materials, Nano materials synthesis and applications
- In-depth coverage of Semiconducting and Optical materials
- Richly illustrated with reproducible diagrams - Over 400 figures, for better understanding of the concepts
- The book also contains a rich pedagogy:
 - Review questions and answers: 550
 - Short answer-type review questions: 778
 - Descriptive-type review questions: 171
 - Solved examples: 182
 - Exercises: 48



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2. Mrs.T.R.Indhumathi





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NON-TOXIC HYGIENE PRODUCT

E. Devaki

Assistant Professor
Department of Costume Design and Fashion
PSG College of Arts Science, Coimbatore.

T.R. Indumathi

Department of Costume Design and Fashion
PSG College of Arts Science, Coimbatore.

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Title : **Non-Toxic Hygiene Product**

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Mrs. E. Devaki completed her under graduation and post-graduation in Costume Design and Fashion at PSG College of Arts and Science in the year 2007, M.Phil in Textiles at Vinayaga Mission University in the year 2008, and MBA in Marketing at Bharathiyar University in the year 2011. She is pursuing her Doctorate in Costume Design and Fashion at PSG College of Arts and Science. She has also cleared National Eligibility Test (NET) in the year 2015. Serving as an Assistant Professor in the Department of Costume Design and Fashion at PSG College of Arts and Science from the year 2007 to till date with an experience of twelve years. She received "Award of Academic Excellence" for the year 2015 during the Awards day-2016 at PSG college of Arts and Science. ILF&S - PSGCAS Skill Training center received "Best institute-women skill development" in Summit Cum Awards on Skilling India for two consecutive years i.e. 2014 and 2015 for which she is acting as an additional coordinator.

She has published more than 20 research and review papers in SCI/ Indexed/ Refereed/ Conference/ Books. She has presented more than 35 papers and posters in conferences and seminars both in national and international forums. She has attended more than 40 programs which include trainings/ workshops/ seminars/ conferences/ faculty development programs. She has acted as a resource person for few training programs. She is a member of board of studies/ question paper setter/ valuation board/ practical examiner of many universities and autonomous colleges. She is a member of ITCOT Consultancy service Pvt. Ltd as an assessor for skill training programs funded by Ministry of Textiles, Government of India. She is acting as an additional co-ordinator for the skill training center in the college which conducts free courses on tailoring, pattern making, embroidery and CAD. Adding to her academic contribution she has organized national seminar, national conference, fashion show, extension activity and many others. She is well versed in designing software such as TUKA, Lectra, Adobe and Coral draw along with basic computer knowledge. Her other area interests are yoga, sports and free hand sketching.



Mrs. T.R. Indumathi completed her under graduation in Apparel Fashion Designing at Avinashilingam University in 2007. She also had done her diploma in Multi Media and Graphics Technology at Avinashilingam University, at the year of 2007. During this period she had received second prize in Relish 2007, Fashion Parade held at Trichy. She completed her certificate course in garment manufacturing technology with A+ grade, in 2008 at Apparel Training and Designing Center. She also completed a short term course with A+ grade in CAD, in 2008. She was employed as assistant manager and production coordinator in Aimmuruvar, an export concern in Tirupur at the period of 2008-2010. She completed her Post graduation in Apparel Fashion Designing, with distinction in the year of 2016 and she was awarded as "Best Outgoing Student" at NIFT-TEA College, Tirupur. Her research works are based on Technical Textiles specialized in Eco Based Management. She is pursuing her Master of Philosophy in Costume Designing and Fashion in the field of medical textiles at PSG college of Arts and Science, affiliated to Bharathiar University. She has published three research papers in peer reviewed international journals, presented four papers from national/ international conferences and attended few seminars regarding textile technology and projects. Her area of interest is on CAD, Agro and science based researches with new technologies.



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3. Dr.A.Muthusamy, Mrs.D. Maheshwari

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Dr. A. Muthusamy | D. Maheshwari | D. Rajagopal

ABOUT THE AUTHOR

A.Muthusamy is currently working as an Associate Professor, Department of Computer Technology, Dr.N.G.P.Arts and Science College (Autonomous), Coimbatore, Member Indian Society for Technical Education, IIT (D) campus, New Delhi. He holds an MCA in Computer Applications from Anna University, Chennai and PhD in Computer Science from Bharathiar University, Coimbatore. He received his MCTS (Microsoft Certified Technology Specialist) certificate in DOT NET from Microsoft (USA). His area of research includes Database Systems, Data and Web Mining, Software Engineering and its Applications. He is a Reviewer of 5 National / International Journals. An inspired writer, he has authored 10 Research papers and 6 Technical presentations. He received honors and awards from various Institutions.

D.Maheshwari is currently working as an Associate Professor, Department of Computer Technology, Dr.N.G.P.Arts and Science College (Autonomous), Coimbatore, Life Time Member IAENG International Association of Engineers. She holds an M. Sc Computer Science from Kovalam College of Arts and Science, Coimbatore and M.Phil in Computer Science from Bharathidasan University, Tiruchirappalli. Her area of research includes Data Communication, Wireless Networks. An inspired writer, she has authored 11 Research papers and 5 Technical presentations.

D.Rajagopal is presently working as an Assistant Professor, Department of Computer Application (PG), Vivekanandha College of Arts and Sciences for women (Autonomous), Namakkal District, Tamil Nadu. Member Indian Society for Technical Education, IIT (D) campus, New Delhi. He holds an MCA in Computer Applications from Pariyar University, Chennai and M.Phil in Computer Science from PRIST University, Thanjavur. His area of research includes Networking, Computer Organization and its Architecture. He is a Reviewer of 3 National / International Journals. He had authored 15 Research papers and 4 Technical presentations in National / International Conference. His article had published as a chapter in "Cognitive Science and Technology" by E.A. Hunter.

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A. Muthusamy

Associate Professor
Department of Computer Technology
Dr. N.G.P Arts and Science College (Autonomous)
Coimbatore.

D. Maheshwari

Associate Professor
Department of Computer Technology
Dr. N.G.P Arts and Science College (Autonomous)
Coimbatore.

D. Rajagopal

Assistant Professor
Department of Computer Application (PG)
Vivekanandha College of Arts and Sciences for women (Autonomous)
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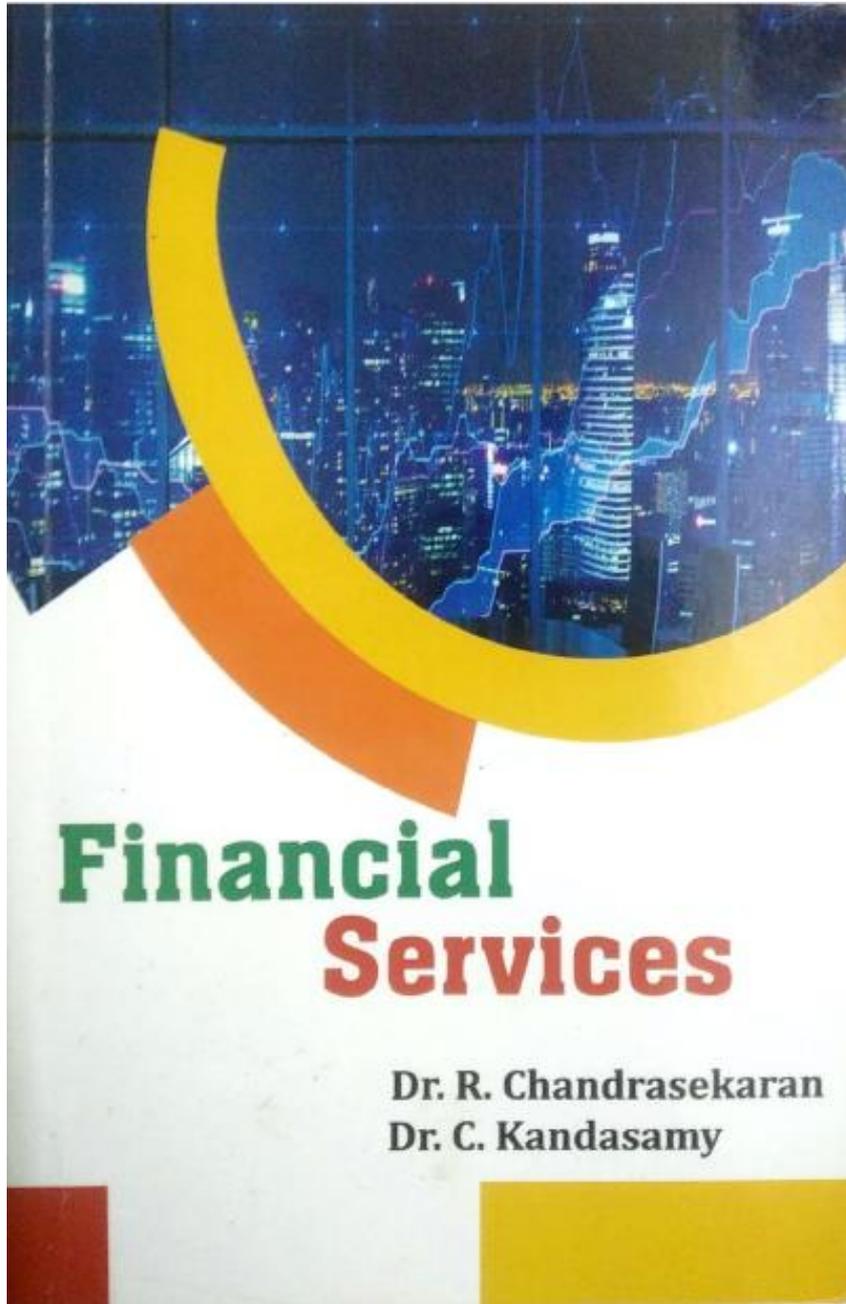
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About the Author



Dr. R. CHANDRASEKARAN MBA., M.Phil., Ph.D., SET, M.Com., SET, PGDPM., PGDED. Working as an Assistant Professor since 2016 in Dr.N.G.P Arts and Science College. (Autonomous) Previously worked in CBM College since 2009. He has so far written 15 Research Articles in various journals. He has teaching experience over 10 Years. His Areas of interest in teaching and Research and includes Finance and Human Resource Management. He acts as Resources Person in Various College in around Coimbatore. He has Received National Level Best Faculty Award at Chennai

About the Co Author



Dr. C. KANDASAMY M.Com (CA), MBA., M.Phil., Ph.D. Working as an Assistant Professor Since 2018 in Dr.N.G.P Arts and Science College. (Autonomous) Previously worked in CBM College since 2007. He has so far written 07 Research Articles in various journals. He has teaching experience over 12 Years. His Areas of interest in teaching and Research and includes Finance.

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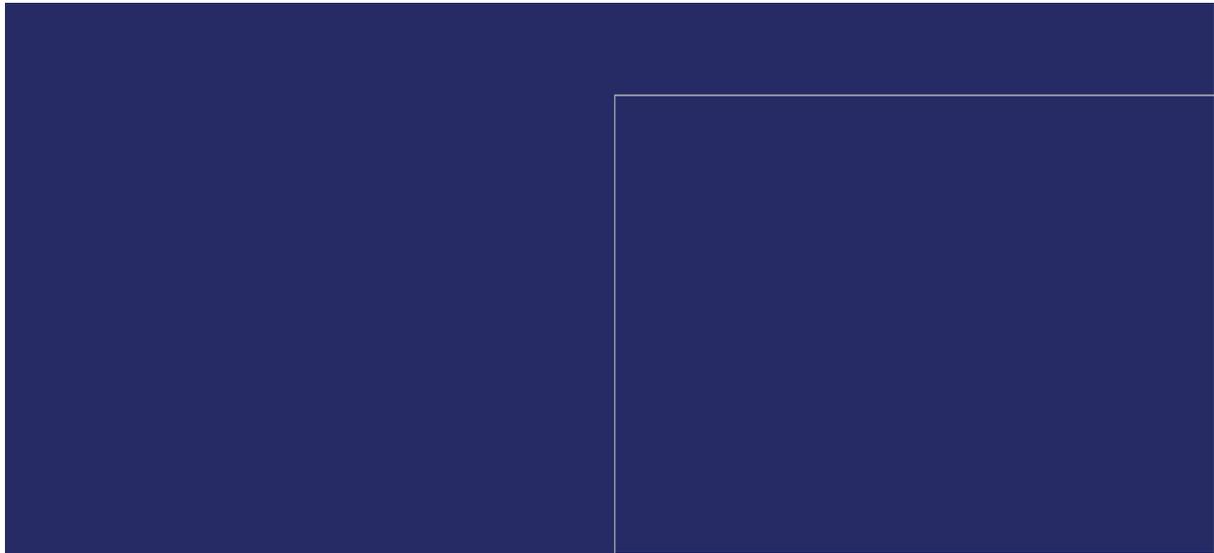
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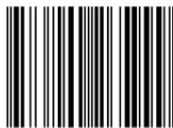
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The book focuses on bench marking the skills necessary for effective functioning in the field of information technology and identified by itemizing the descriptors and competencies for the software developers. The ranking of the statements in terms of the most deployed and least deployed is thus derived and the statements correlated to the CEFR, CLB, ACTFL, NOS-UK and NOS of the NSDC-India. It must be possible to evolve a system of training to the newly recruited staff and organize also in service programmes based on the deployed abilities that are identified. By extension, the findings of this research may be applicable to parallel companies and other segments of the information technology industry, what is more significant of the book is that it is believed to evolve a model for studies in fields other than Information Technology.



Vital Language Competencies for Techies

Roweena D'couth



Dr. Roweena B D'couth has been teaching the English Language for over a decade, her experience in training with excellent coaching strategies and meeting with desired expectations and deadlines is an outcome of years of using the language effectively and updating oneself with current trends and the ever evolving changes in the language.

Reading and Writing competencies of Software Developers

An empirical study



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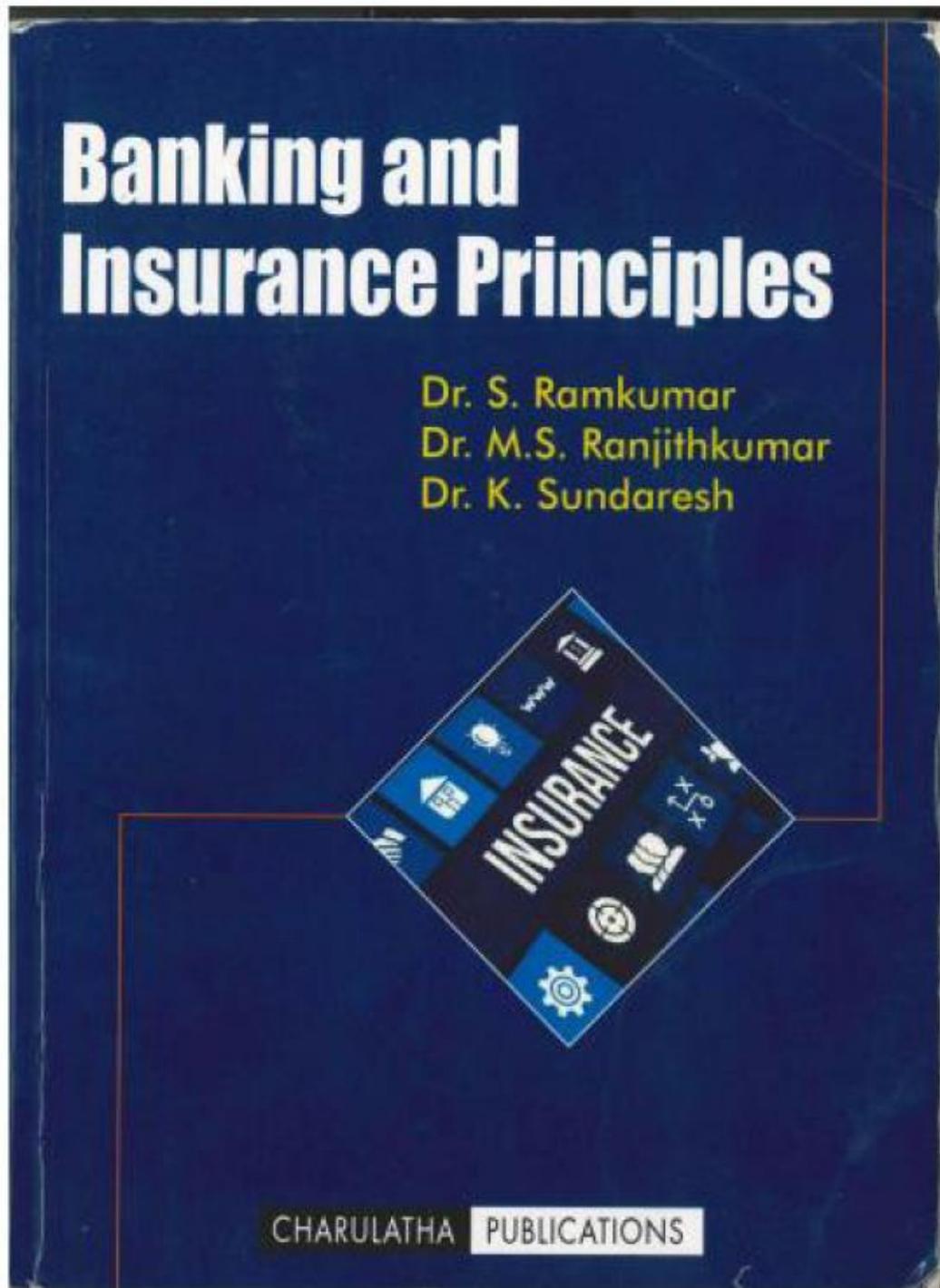
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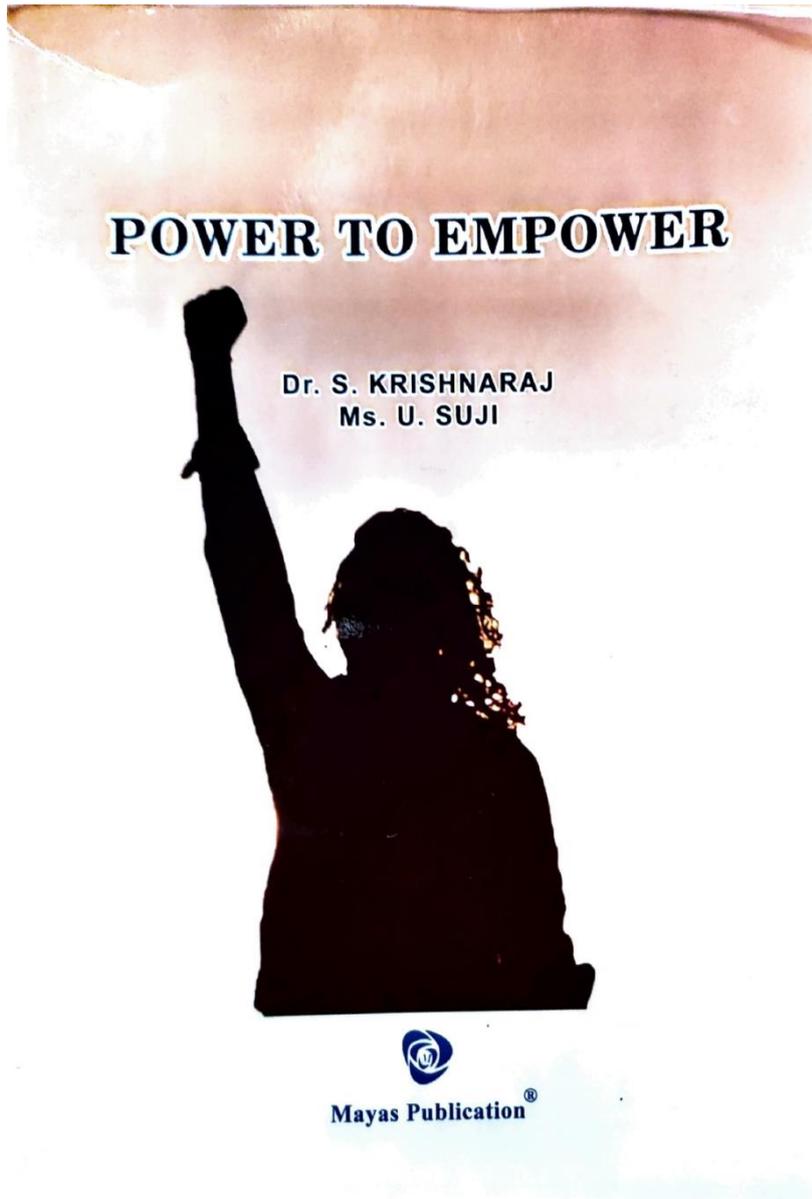
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Dr. S. Krishnaraj as a Principal, contributed his valuable ideas and made remarkable changes and developments in Bharathiar University Arts and Science College, Pollachi for the last one and half years. In addition to this assignment, he holds the position of Associate Professor in Bharathiar School of Management and Entrepreneur Development, Bharathiar University, Coimbatore, where he is serving as Associate Professor and in other capacities for the past three years. He also got Outstanding Faculty Awards in management in 2017, 2018 & 2019 for his exceptional academic records and research excellence in the area of Human Resource Management. He has filed patent with the patent of office Journal. He has published more than 20 papers in reputed National and international Journals. Speaker of Career guidance programme organized by the Department of School Education, Tamil Nadu and Daily Thanthi National daily newspaper . Delivered Keynote address in numerous National and International Conferences organized by the colleges in Tamilnadu.



Suji.U, an eminent research scholar in the domain of Business management with seven years of corporate experience, a dynamic person with a great team management skill and smart working strategies, with a great passion for teaching, attempted a shift from corporate to campus. She is a person who strongly believed that teaching, besides knowledge transfer, should be a source to a positive transformation in the receiver. She completed BCS (Corporate Secretaryship) from PSG college of Arts and Science, Coimbatore, Master of Business Administration and Master of Philosophy from Bharathiar University, Coimbatore.



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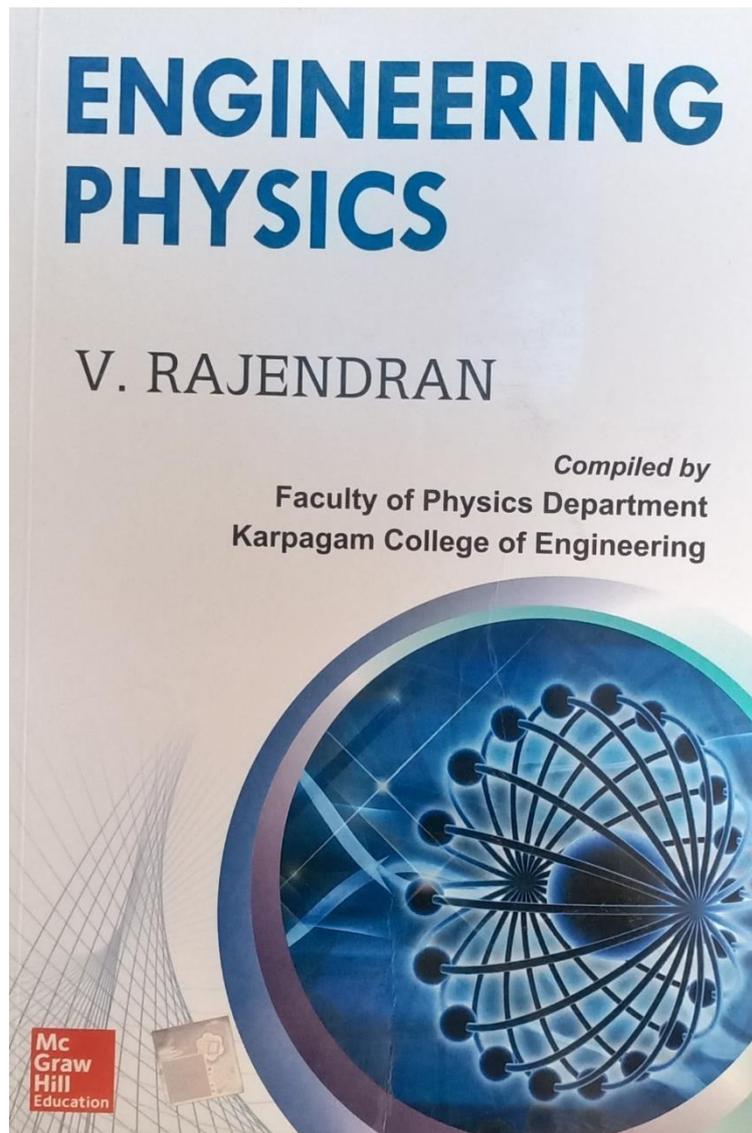
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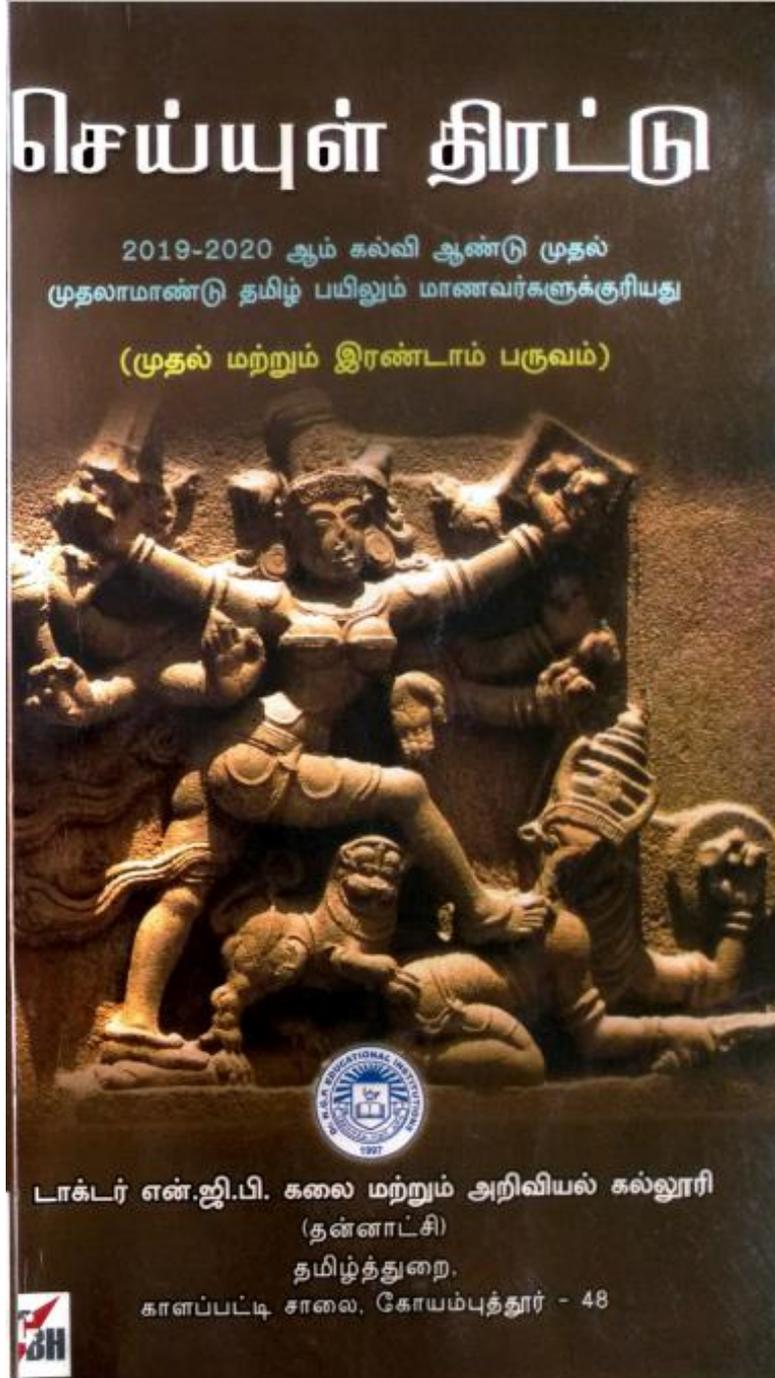
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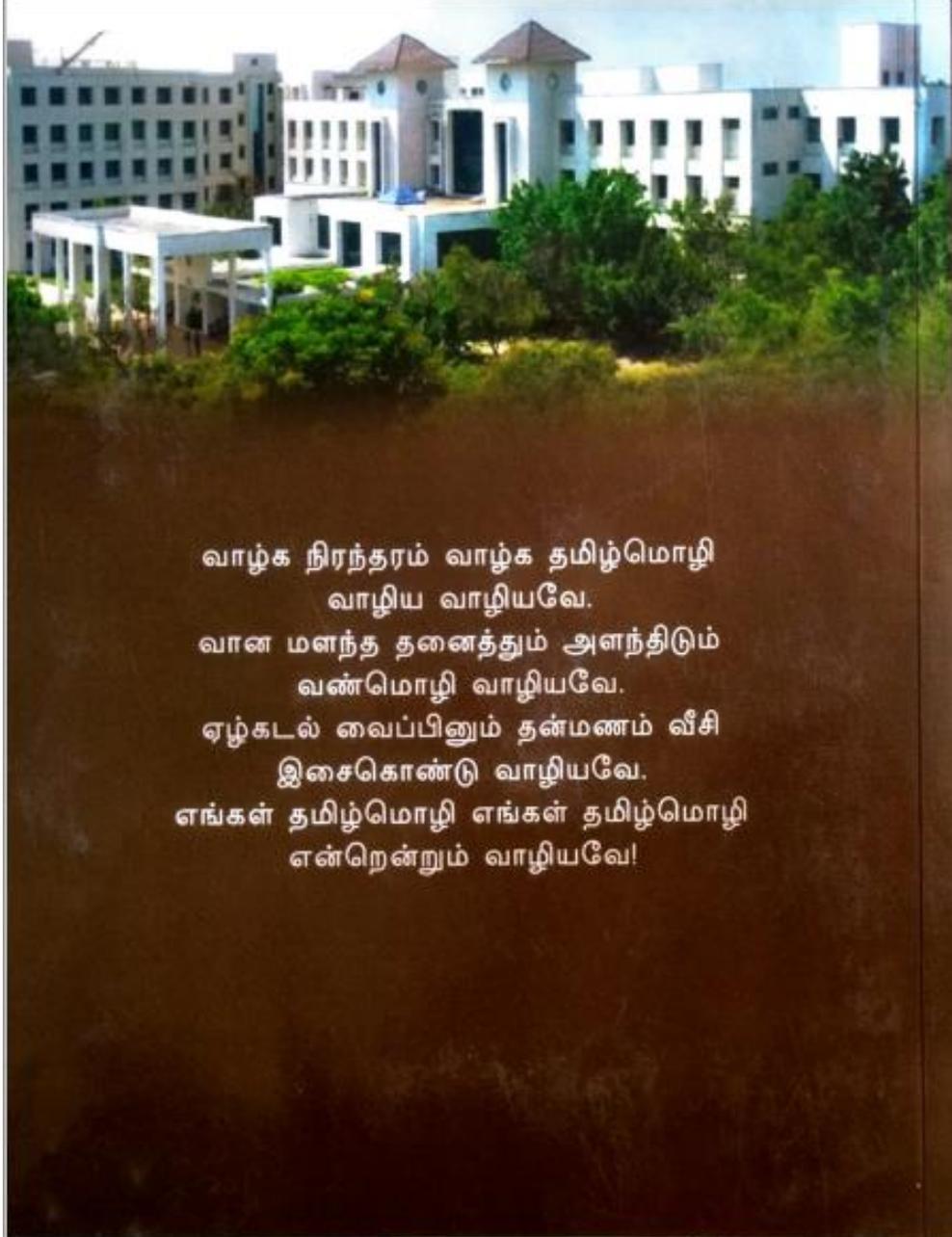


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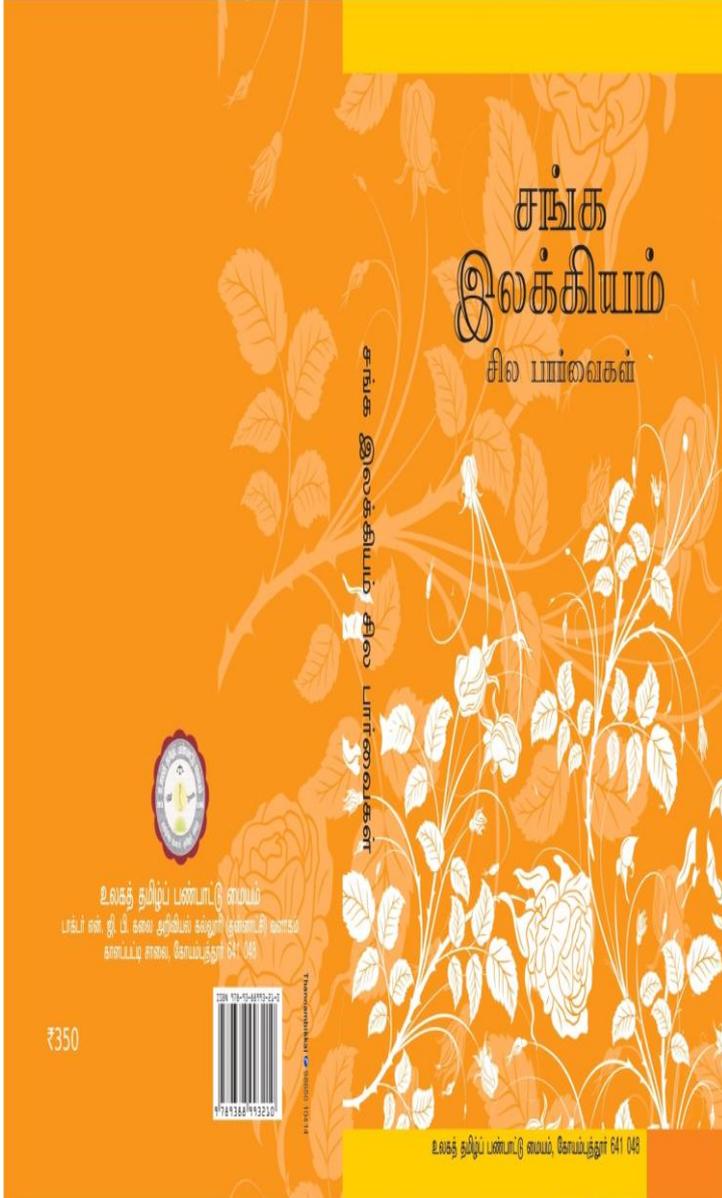
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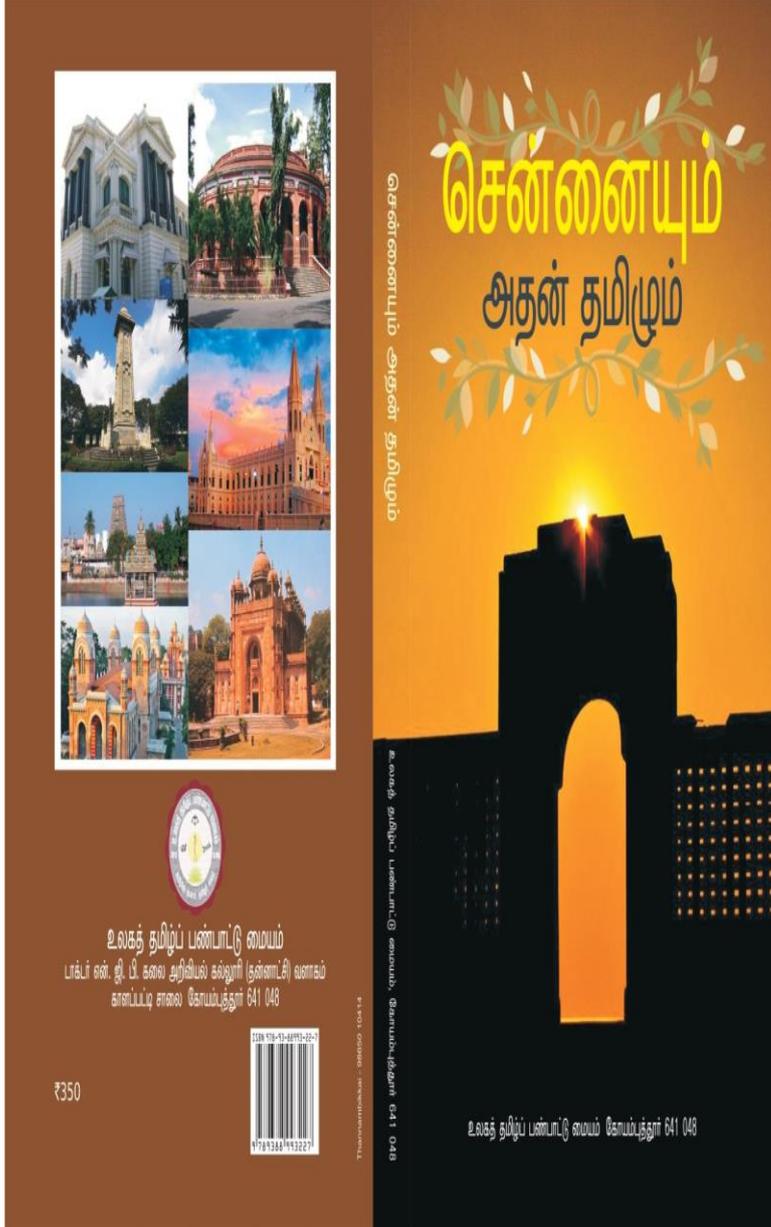
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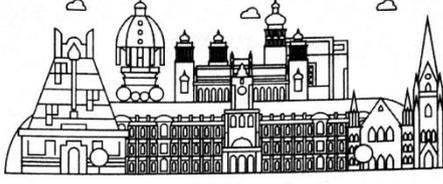


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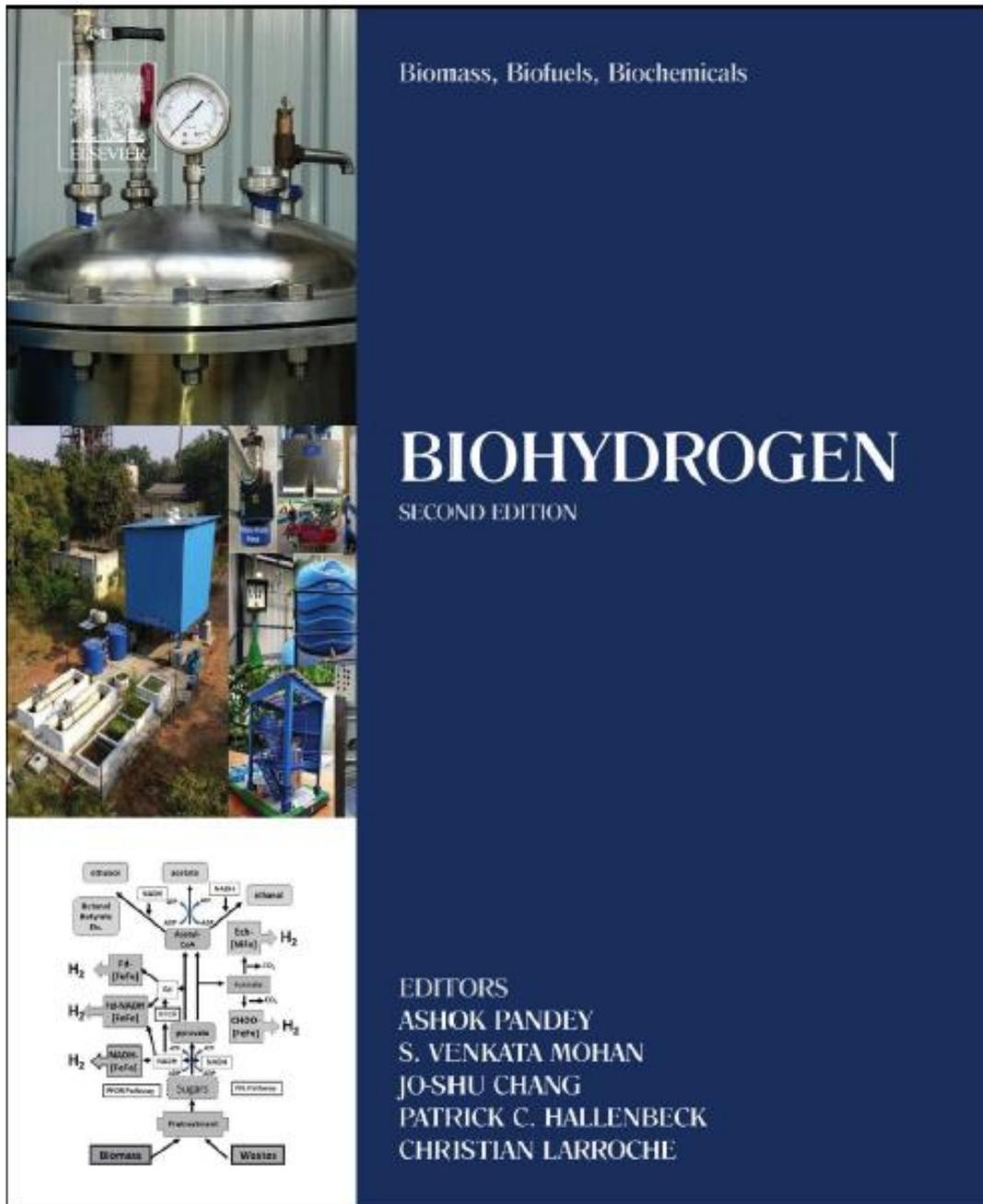
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CHAPTER

17

Metabolic Engineering and Molecular Biotechnology of Biohydrogen Production

S. Mohanraj¹, Ashok Pandey², S. Venkata Mohan^{3,6},
K. Anbalagan⁴, S. Kodharyolii⁵, V. Pugalenth⁵

¹KMCH Research Foundation, Coimbatore, India; ²Centre for Innovation and Translational Research, CSIR-Indian Institute of Toxicology Research, Lucknow, India; ³Bioengineering and Environmental Sciences Lab, CEEFF, CSIR-Indian Institute of Chemical Technology (CSIR-ICT), Hyderabad, India; ⁴Department of Biochemistry, Dr. N.G.P. Arts and Science College, Coimbatore, India; ⁵Department of Biotechnology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli, India; ⁶Academy for Scientific and Industrial Research (AcSIR), Hyderabad, India

1. INTRODUCTION

The global energy supplies are deeply dependent on fossil fuels, such as oil, coal, and natural gas, which generate an environmental issue because of CO₂ emission. Fossil fuels not only impart a serious global warming problem but also cause depletion of fossil resources at a faster rate. The second-generation biofuels, such as methane, hydrogen, and ethanol, play a vital role in solving the energy crisis. Among the various biofuel options, biohydrogen (H₂) gas is a viable alternative fuel and becoming a nonpolluting ideal energy carrier in the future. It is safer and the most important fact being that it is a carbon-free fuel, oxidizing into water vapor and energy as a combustion product. Thus H₂ is an ecofriendly renewable energy to replace fossil fuels [1,2]. Hydrogen can be obtained from naturally available resources, such as water, fossil hydrocarbons, hydrogen sulfide, and biomass. At present natural gas (40%), crude oil (30%), coal (18%), water electrolysis (4%), and (1%) biomass are main sources of the production of H₂ [1,2].

Hydrogen production from carbon sources by using microorganism is called as biological hydrogen production (biohydrogen) and that processes can be operated at ambient temperature and atmospheric pressure. The methods available for the biohydrogen production from





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Biomass, Biofuels, Biochemicals: Biohydrogen, second edition, provides general information, basic data, and knowledge on one of the most promising renewable energy sources, including its production and applications. The book describes a green technology for abating environmental crises and enabling the transformation into a sustainable future. Researchers, students, and science enthusiasts alike will appreciate this holistic view of biohydrogen production, which details the functional mechanisms employed, operational configurations, influencing factors, and integration strategies. With 50% more content, this new edition outlines the scaling of processes and features material from experienced international researchers working at the interface of biotechnology and engineering.

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Biometric Authentication in Online Learning Environments

A.V. Senthil Kumar
Hindusthan College of Arts and Science, India

A volume in the Advances in Educational
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Education has undergone, and continues to undergo, immense changes in the way it is enacted and distributed to both child and adult learners. In modern education, the traditional classroom learning experience has evolved to include technological resources and to provide online classroom opportunities to students of all ages regardless of their geographical locations. From distance education, Massive-Open-Online-Courses (MOOCs), and electronic tablets in the classroom, technology is now an integral part of learning and is also affecting the way educators communicate information to students.

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Chapter 8

Keystroke Dynamics: A Behavioral Biometric Model for User Authentication in Online Exams

Senthil Kumar A. V.

Hindusthan College of Arts and Science, India

Rathi M.

Dr. N. G. P. Arts and Science College, India

ABSTRACT

Online learning has entirely transformed the way of learning by the students. Online tests and quizzes play an important role in online learning, which provides accurate results to the instructor. But, the learners use different methods to cheat during online exams such as opening a browser to search for the answer or a document in the local drive, etc. They are not authenticated once they login and progress to attend the online exams. Different techniques are used in authenticating the students taking up the online exams such as audio or video surveillance systems, fingerprint, or iris recognition, etc. Keystroke dynamics-based authentication (KDA) method, a behavioral biometric-based authentication model has gained focus in authenticating the users. This chapter proposes the usage of KDA as a solution to user authentication in online exams and presents a detailed review on the processes of KDA, the factors that affect the performance of KDA, their applications in different domains, and a few keystroke dynamics-based datasets to authenticate the users during online exams.

INTRODUCTION

Authentication is the process to ensure an individual's identity. This provides access control for systems by verifying the user's credentials with the credentials stored in a database. Only authenticated users are allowed to access the protected resources of the organizations which are called as authorization process. The terms authentication and authorization are often used interchangeably; Authentication confirms the identity of a registered user before permitting access to the protected resource, whereas authorization confirms that the authenticated user has the permission to access the requested resources or not. Security

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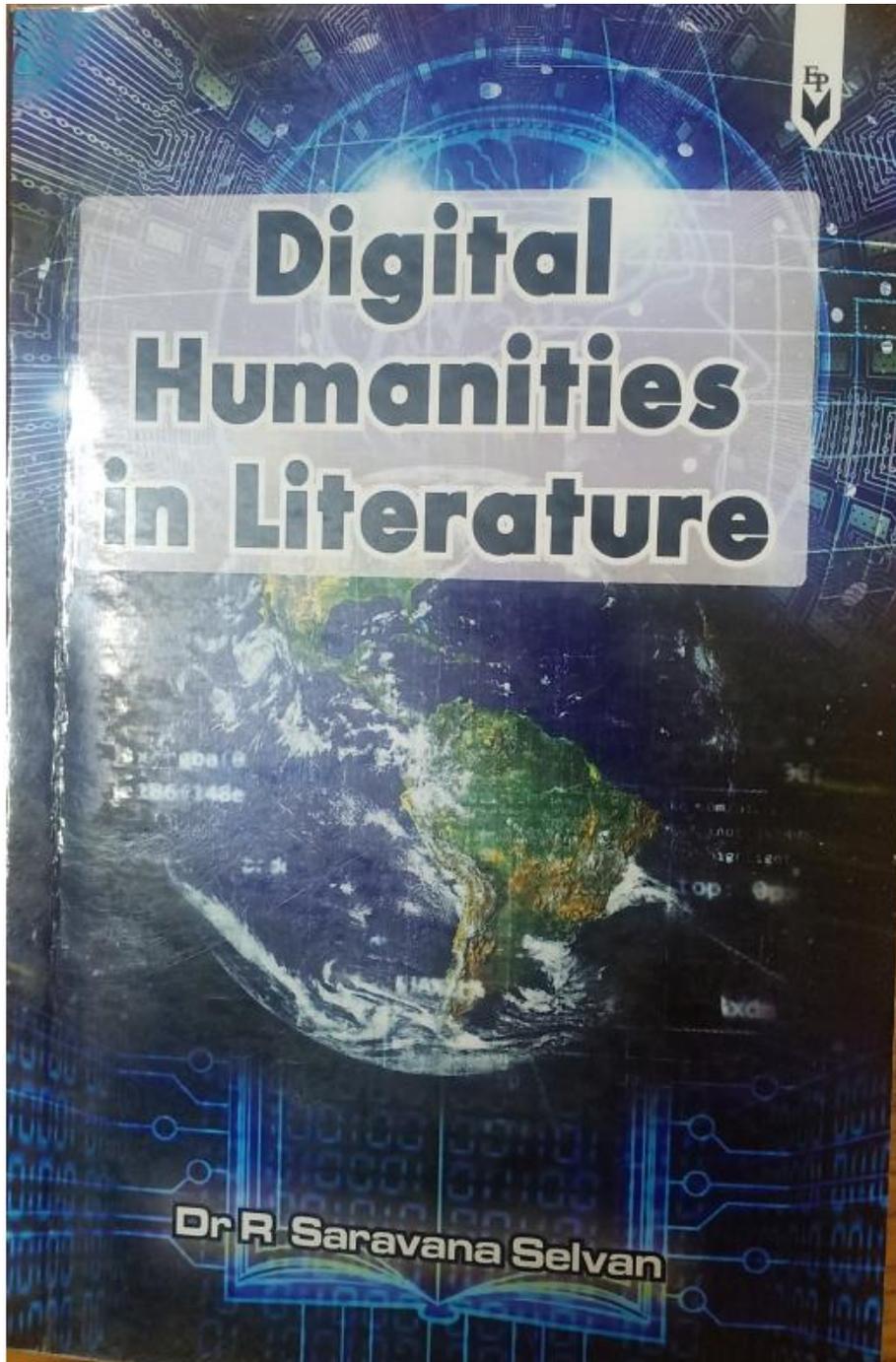
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Dr. R. Saravana Selvan, Professor and Head, has specialized in English Language Teaching and British Literature. He is a dedicated educationist. His conviction and passion are to promote academic, emotional and social wellbeing of all students under his care. His 33 years of experience in teaching, research and administration has moulded him into an impressive classroom teacher and able administrator. He has developed a course on Public Speaking which is included in the curricula of various institutions. His Spoken-English package "Fluency in Ninety Days" has received much acclamation at various levels. In addition to being known as a teacher, he is well-known as a trainer in English communication skills and soft skills, conducting workshops and bridge courses for students and faculty in various institutions in and around the state. He has been a regular Resource Person to at least seven UGC-Human Resource Development Centres of the country. He has authored more than ten books and published more than forty-five research articles in national and international journals to his credit. He holds the credit of establishing English Language Lab and Foreign Language Lab in the department. With the experience of holding several administrative positions related to Industry-Institution collaboration, he understands the needs of the job market and designs the teaching to suit the future needs of the students. With his rich experience, multifaceted traits and qualities, he leads the Department with vision and dedication.



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NOVEL TRENDS AND TECHNIQUES IN LITERATURE AND LANGUAGE RESEARCH

Volume-4

Editors

J.KARTHIKEYAN
R.SRINIVASAN
W.CHRISTOPHER RAJASEKARAN



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Editors : Dr.J.Karthikeyan,
Dr.R.Srinivasan,
Mr.W.ChristopherRajasekaran
Department of English
School of Social Sciences and Languages
Vellore Institute of Technology
Vellore-632014, Tamil Nadu, India

Co-Editor : Dr.X.John Paul, Dr.PrajeeshTomy
Department of English
School of Social Sciences and Languages
Vellore Institute of Technology
Vellore-632014, Tamil Nadu, India

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211

A discourse on diaspora - exploring the Cultural Identity Crisis in Jhumpa Lahiri's 'The Namesake'

Ms. A. Govardhini,
PhD Research Scholar,
Department of English,
Dr. N.G.P Arts and Science College,
Coimbatore, T.N, India.
govardhini21@gmail.com

Dr. R. Vithya Prabha,
Prof & Head,
Department of English,
Dr. N.G.P Arts and Science College,
Coimbatore, T.N, India.
vithya.prabha@gmail.com

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The term 'Diaspora' means "to scatter" in Greek. It describes a community of people who live outside life. Diaspora is a root in the sense of loss and alienation, which emerges as a result of migration and expatriation. Diaspora deals with alienation, displacement, existential rootlessness, nostalgia, quest of identity. It is related to amalgamation or disintegration of cultures. It reflects the immigrant experience which comes out of the immigrant settlement. So the migrant people suffers from the pain of being far from their homes, the memories of their motherland, the sufferings of leaving behind everything proverbial agonizes the minds of migrant.

Cultural identity is the process of sharing conjunct knowledge called as traditions, heritage, language, aesthetics, norms and customs. It states that identification or sense of belonging to a particular group which is based on different cultural categories, including nationality, ethnicity and gender. Cultural identity produce people usually affiliate with quite one cultural cluster, it is complicated and multifarious.

In her debut novel *The Namesake* (2003) follows the cultural bias and inclusion of cultural identity which compiles the struggle and complication of immigrant people. This novel depicts the different cultures, traditions and lives of the immigrant population. It throws light upon identity of diaspora





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Carl Jung's Psychological Concepts as revealed in Namita Gokhale's A Himalayan Love Story

M.LEENA CHANDRIKA
Ph.D. Research scholar/English
Nehru Arts & Science College, Cbe
leena.mahalingam@srec.ac.in

Dr.VITHYA PRABHA
Professor & Head,
Dept of English
Dr.N.G.P.Arts and Science college, Cbe
vithya.prabha@gmail.com

Abstract:

This paper focuses on the various psychological concepts as revealed in Namita Gokhale's novel A Himalayan Love Story. Parvati, the protagonist in the novel undergoes various psychological problems and strives to come out of her troublesome inner self and attains individuation. Gokhale never fails to trap the attention of the readers through out the novel. So this particular paper projects how various psychological problems is related to Carl Jung's Psychological concepts.

INTRODUCTION

Psychoanalytical criticism is deemed as one of the most significant areas of research in the recent decade. Psychological analysis of any work opens up multiple avenues to gain awareness about the thought processes of people and the prevailing social system. Psychological theories of Sigmund Freud, Carl Jung, Jacques Lacan, Karen Horney and Charles Mauron have influenced many psychoanalytic writers, and Sigmund Freud and Carl Jung have always played a vital role among other psychological theorists. This chapter will

analyse the psychological insights of Parvati from the novel, *A Himalayan Love Story*; by Namita Gokhale applying the concepts of Carl Jung.

The most prominent psychological concepts of Carl Jung are The Quest for Identity, Complexes, The collective unconscious, The Self, Persona, The Shadow, Anima and animus and Individuation. *A Himalayan Love Story* is divided into two parts as "Parvati: The Dance of the Honeybee" and "Mukul: Dreams of Reason" of which the first part is dedicated to the life and psyche of the protagonist character, Parvati.

PARVATI'S EARLY LIFE

Parvati was born and brought up in Jeolikote near Nainital, a place known for its idyllic nature and simple lifestyle. She lost her father in her infancy and had no siblings. She was nurtured in a small house which belonged to her mother's brother. She did not find the place comfortable since their house was located near a highway and most often their sleep was disturbed by the hooting of the vehicles. She was also concerned that her uncle, Hiranand Joshi, was despising them. She hated him even without any reasons. Parvati's mother was an illiterate and she got married at her 13 years of age. Parvati's father was addicted to gambling and lost all his fortune. After her father died of tuberculosis, they became dependent on her uncle, Hiranand. Their only income was the rent from the kirana shop, which was given by him.

IDENTITY AND INDIVIDUATION

Jung considered that an individual's sense of identity is a significant contributor in their consciousness. This stands behind every activity that a person performs to endure his or her identity in their world of existence. This acts as the deciding factor to organize one's thought processes regulating their feelings and emotions. "It is the part that links the inner and outer worlds together . . ." (journalpsyche.org). Jung





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BACKCHANNELING AND OTHER TOOLS FOR THE BETTERMENT OF TEACHING AND LEARNING EXPERIENCE

Ms. A.P. Indhuja,
M.Phil research scholar,
Department of English,
Dr.N.G.P arts and science college, Coimbatore.

Dr. R. Vithya Prabha,
Prof & Head,
Department of English,
Dr.N.G.P Arts and science college, Coimbatore.
indhujapalanisamy1996@gmail.com
Dr NGPASC 2019-20HUMOOI

Abstract:

Digital era brought drastic changes in teaching and learning process. It made things easier for both teachers and students and also made complex problems. Students can collect information unconditionally and with no time restriction from internet and other digital sources. Teachers can make easy and effective presentations of difficult topics with digital tools. Such most effective tools involve in teaching and learning process are discussed in this paper. This paper also discusses difficulties faced by both teachers and students in Digital Classrooms. Towards the end, this paper deals with backchanneling technology and its impact on teacher and student in a learning platform.

Keywords: Digital learning studio, backchanneling technology, gamified learning.

Full Paper:

Digital era and improvement in technology uplifted teaching and learning process to its next level. Advancement in technical aids used in learning environment created a vir-





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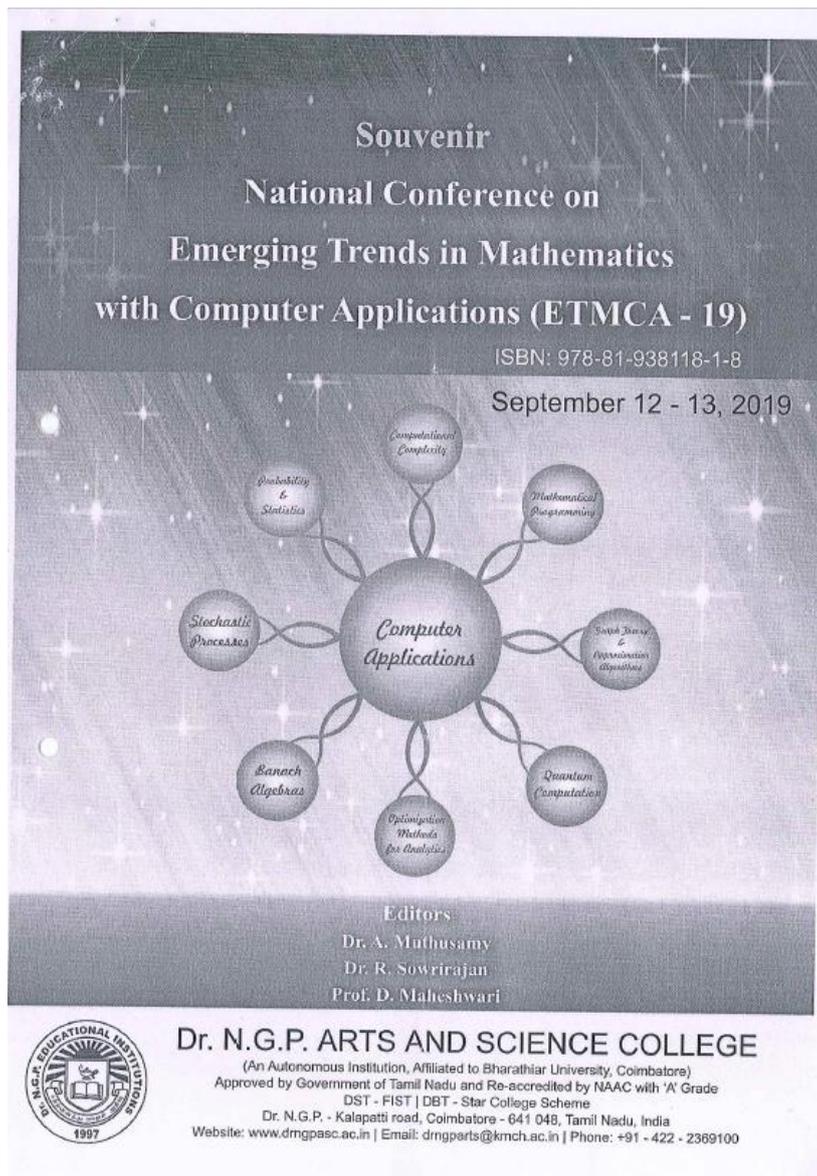
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1. S. Manimekalai





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ETMCA_E_09

THE EIGENVALUES FOR THE PATH P_5

S. Manimekalai and P. Gowsalya

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

Dr. G.R. Damodaran College of Education, Coimbatore, Tamil Nadu, India

ABSTRACT

First we begin with the some finite graph G in which each vertex of G is initially arbitrarily colored red or blue. At each step in our process, we select a random edge of G and recolor both its endpoints blue with probability p or red with probability $q = 1 - p$. This edge flipping process generates a random walk on the set of all color patterns of G . We show that eigen values for this random walk can be naturally indexed by the subsets of the vertices of G and also calculate the eigenvalues for some finite graphs such as the path P_5 .





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2. Mrs.M. Rathi.

ETMCA_I_02

A SURVEY ON GROWTH OF E-COMMERCE BUSINESS IN INDIA

Logesh. S and Rathi. M

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

E-Commerce is usually associated with buying and selling of the products over the internet or conducting any transaction involving the transfer of ownership or rights to use goods and services through a computer mediated network. In other words, it is the buying and selling, marketing and servicing, delivery and payment of products, services information over the internet and other networks. The rapid growth in use of mobile and internet users has facilitated ecommerce business in both urban and rural cities. E-Commerce has changed the nature of the value propositions that companies now offer to their customers. In this paper, E-commerce technologies, the e-payment systems, steps for developing a business plan, the benefits of e-commerce key challenges and future of ecommerce. The convergence of content sites and social networks has resulted in emerging E-commerce business models. The study might serve as a starting point for further research in e-commerce in India

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3. M.Priyadharshini

ETMCA_I_03

MULTI-LABEL CLASSIFICATION WITH PSO BASED SYNTHETIC MINORITY OVER-SAMPLING TECHNIQUE (PSOSMOTE) FOR IMBALANCED SAMPLES

M. Priyadharshini

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

Lately, the learning from unbalanced data has emerged to be a pre-dominant problem in several applications and in that multi label classification is an evolving data mining task, learning from unbalanced multilabel data is being thoroughly examined recently, and various resampling techniques have been proposed before. However, the available algorithms-based SMOTE makes use of the same sampling rate for every instance of the minority class. This leads to sub-optimal performance. In order to deal with this problem, a new Particle Swarm Optimization based SMOTE (PSOSMOTE) algorithm is proposed. The PSOSMOTE algorithm employs diverse sampling rates for multiple minority class instances and gets the fusion of optimal sampling rates. In this research, PSO-SMOTE algorithm is expected to deal with classification of unbalanced datasets. Then, Bayesian technique is combined with Random forest for multi-label classification called as BARF-MLC and in that hierarchical tree is created to address the inherent label dependencies among samples such as ML-Forest classifier, Predictive Clustering Trees (PCT), Hierarchy of Multi Label Classifier (HOMER) by taking the different metrics including precision, recall, F-measure, Accuracy and Error Rate into consideration.





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4. Dr.P.Iswarya

ETMCA_I_08

A COMPARATIVE ANALYSIS OF STRESS DETECTION METHODS IN SOCIAL NETWORKS

Dr. P. Iswarya

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

Psychological stress is an important factor that affects our healthy life. Traditional stress detection methods use face-to-face interviews which is time consuming and laborious task. Due to rise in social media networks, instead of making interaction in real; most of the people spend their daily interaction with their family and friends through social media. The user emotions such as angry, sad, happy, joy and depressed conditions in social media can be identified through their weekly tweets. An identified emotion categorized in to positive and negative tweets, finding their stress state through continuous negative tweets and informing the user regarding the stress state to prevent them from suicide and also from other attacks. The sentence pattern labelling method in twitter contains abundant information for data

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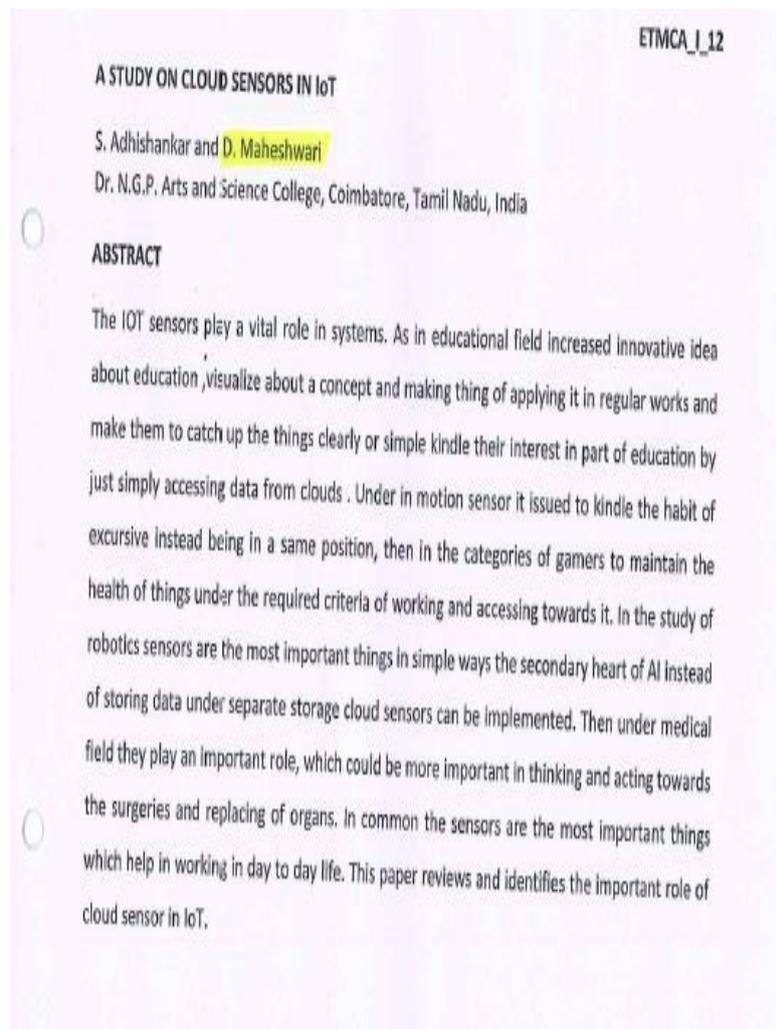
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5. D.Maheswari





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6. Mrs.M. Rathi

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BLUE BRAIN -THE FUTURE GENERATION

A. Kowsik, P. Arun kumar and M. Rathi

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

Human brain is the most valuable and unimaginative creation of the God, which makes man more intelligent and creative. The world's first Artificial brain is called as "BLUE BRAIN". A machine called super computers can function as human brain. Scientists in the all over parts of the world are eagerly doing research to create a virtual brain that can react, think and take an action as humans based on the situations. Computer can think and take decision without any approval of the human brain. Even after the physical brain gets death, the artificial brain will act like the human brain. So, even after the death of the person who uploaded his brain into a machine, his memory power, knowledge, creativity, intelligence, personality of him, feelings and happiness of that man can be used in the future for his upcoming generation or society. Human beings may not live for millions of years but the information and data in his brain could be saved and used for several millions of year. This paper presents an overview on Blue Brain technology.





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7. T.R.Anand

ETMCA_I_15

AUGMENTED REALITY, IT'S APPLICATIONS CHALLENGES: A STUDY

R. Selvarani, S. Lavanya, and T. R. Anand

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

Augmented Reality is a technology enriching the real world with digital information and media, such as 3D models and videos, overlaying in real time the camera view of your smart phone, tablet, PC or connected devices. This paper outlines the characteristics, challenges, and the future enhancement of Augmented Reality. Registration and sensing errors are the major challenges in building effective augmented reality systems. This paper also summarizes the current efforts to overcome the challenges Future directions and areas requiring further research are discussed.





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8. Dr.B.Leelavathi

A SURVEY ON MALWARE DETECTION USING MACHINE LEARNING ALGORITHMS

B. Leelavathi, S. Rajeswari, and G. Sunandha

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

The number of users doing online transactions are growing rapidly ever since, because of the convenience it gives to the user to transact business without being physically present in the areas where the transaction happens. Criminals committing cybercrime are also growing day by day with the increased number of users doing online transactions. Cyber crime covers a wide range of different attack such as cyber extortions, cyber warfare, spreading computer viruses or malware, internet fraud, spamming, phishing, carding, child pornography and intellectual

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9. T.R.Anand

ETMCA_I_17

THE ROBOTIC TECHNOLOGY: IN FUTURE

D. Jenifer Christy, A. Swetha, and T.R. Anand

Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

The 21st century is a century of robotic. In 21st century India has become the biggest and fastest-budding country in the global industrial robot market for it's changing manufacturing environment and improving quality-of-living standards, and also in other services of social sectors. Robotics set to play an ever increasingly important role in society for its influence in every aspect of life including medicine and healthcare, building services, manufacturing food production and transportation etc. So, it will be able to perform complex actions that are capable of learning from humans, driving the intelligent automation phenomenon. Therefore, in this paper we try to elucidate the advantages, limitations of upcoming direction and the fields of application in important sector of future markets, scientific researches and so on.





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10. D.Maheswari

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BIOMETRICS ON IRIS SCANNING

A. Dhatshayani and Dr. R. Rajeswari

Dr. N.G.P Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

Biometrics is the use of a person's unique physiological, behavioural, and morphological characteristic to provide positive personal identification. This process is done by two ways. They are physiological-face, FINGERPRINT, Eyes. Behavioural-Signature, Speech, Key-stroke. The present methodologies used are fingerprints, voice, face, iris, retina, handprint, etc., Applications for approximate computing have been demonstrated in the areas of machine learning, image processing and computer vision. In this paper we make the case for a new

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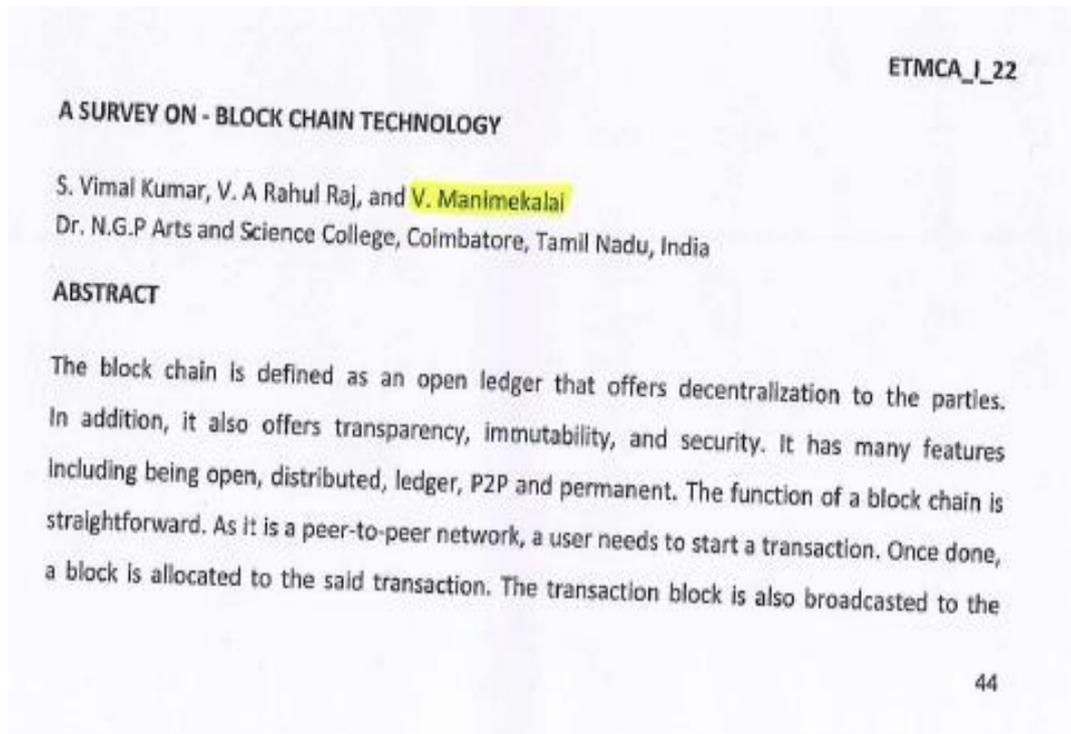
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11. V.Manimekalai





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12. V.Manimekalai

ETMCA_I_20

CYBER SECURITY USING ARTIFICIAL INTELLIGENCE

J. Vinitha and V. Manimekalai

Dr. N.G.P Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

Cyber security is the discipline which can be made more powerful by using Artificial Intelligence (AI). It is very tough to make software for defending against the powerfully developed assaults in systems. It can be cured by using techniques of artificial intelligence. The conventional security systems may be slow and deficient; artificial intelligence techniques can enhance their overall security execution and give better security from an expanding number of complex cyber threats. Beside the great opportunities attributed to AI inside cyber security. To promote the development of cyber security, holistic perspective of associations cyber environment is required in which AI is combined with human knowledge, since neither human nor AI alone has proven overall success in this sphere. In this manner, socially mindful utilization of AI techniques will be needed to further mitigate related risks and concerns.





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13. T.R.Anand

IOT (INTERNET OF THINGS) DESCRIPTION, TASKS, INVESTIGATION

Jaya Subha K. and T.R. Anand

Dr. N.G.P Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

In this era of world IOT can be defined as a modern technology, it is nonentity but wireless communication technology and exchangeable node interconnected in a wobbly global infrastructure network. In this paper, we seek to highlight the IOT (internet of things). The challenges of IOT have been discussed and possible solutions are presented. They are communication, heterogeneity, security, (WSN) Wireless Sensor Network, (RFID) Radio Frequency Identification, (QOS) Quality of Service. Thus, the paper result of complex testing portion of smart home network, it is also aimed to contribute to the IOT and researchers who work in smart application. Using the sensors like (RFID) Radio Frequency Identification we can

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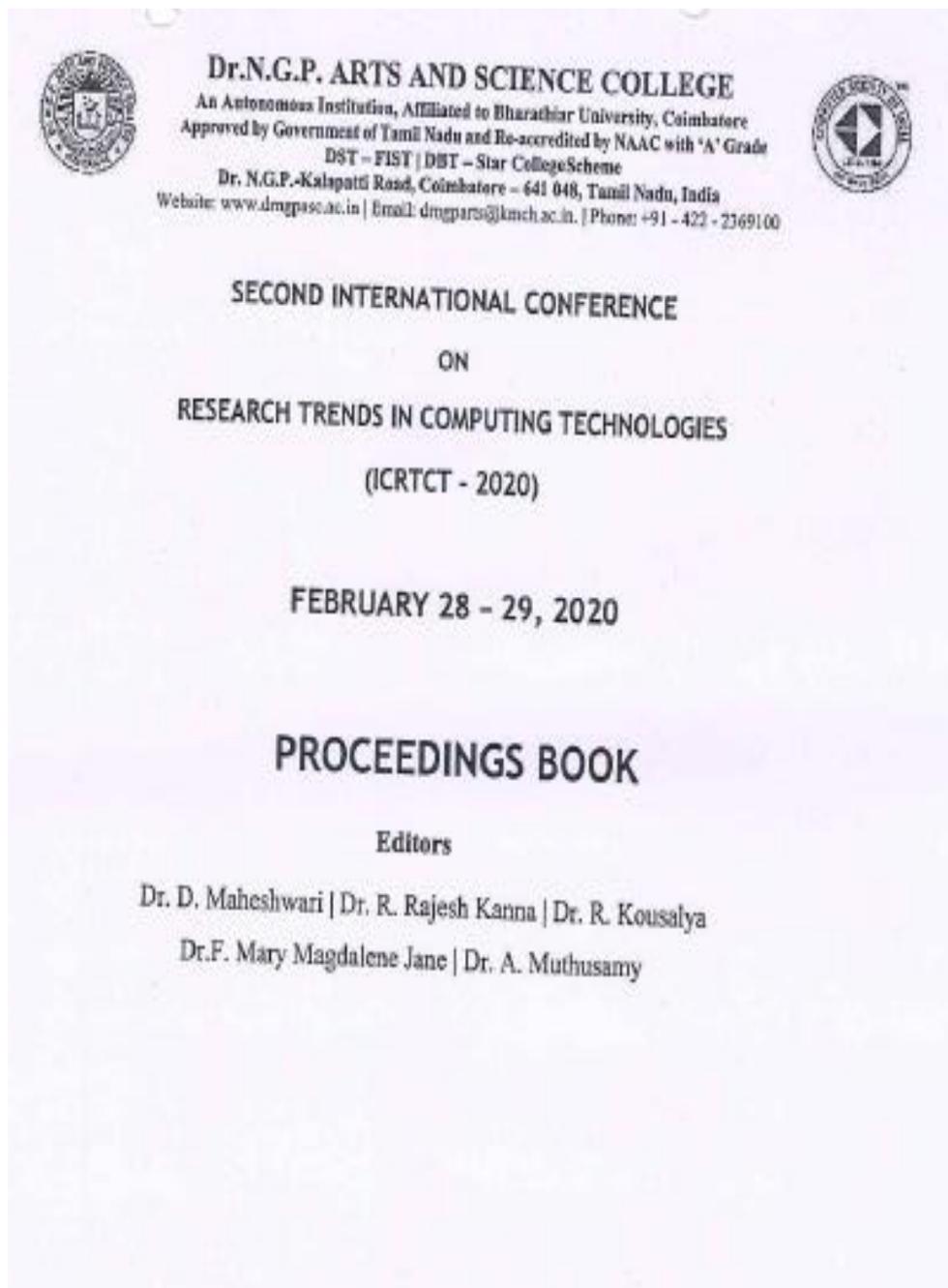
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14. Dr.D.Maheswari





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Proceedings of International Conference on Research Trends in Computing Technologies

Efficient Packet Transmission in Wireless Sensor Networks

B. Dheenadayalan Department of Computer Technology Dr.N.G.P Arts and Science College

Dr. D. Maheshwari Department of Computer Technology Dr.N.G.P Arts and Science College

Abstract

Packet transmission is the main important task in present days, because in wireless sensor networks every time topology construction was changed dynamically then transmission is mostly important task in those situation. This process will be done unnecessary users or nodes enter into wireless sensor networks and then they are accessing services of the other nodes. Traditionally propose simple yet effective scheme, which can identify misbehaving forwarders that drop or modify packets. Extensive analysis and simulations have been conducted to verify the effectiveness and efficiency of the scheme. This schema effectively detect dropped packets from misbehaving users but dynamic changes of the topology in wireless sensor networks less communication process can be done wireless sensor networks. The Internet Transfer Control and Winsock control of visual basic.Net to develop the server side application and uses Microsoft SQL Server for database. The firewall is one of the central technologies allowing high-level access control to organization networks. Packet matching in firewalls involves matching on many fields from the TCP and IP packet header. At least five fields (protocol number, source and destination IP addresses, and ports) are involved in the decision which rule applies to a given packet. With available bandwidth increasing rapidly, very efficient matching algorithms need to be deployed in modern firewalls to ensure that the firewall does not become a bottleneck Since firewalls need to filter all the traffic crossing the network perimeter, they should be able to sustain a very high throughput, or risk becoming a bottleneck. In this paper we propose to develop Enhanced Adaptive Acknowledgement specially designed for wireless sensor networks. EAACK demonstrates higher malicious-behavior-detection rates in certain circumstances while does not greatly affect the network performances.

1.Introduction

Wireless sensor networks is a spatially distributed autonomous sensors based on environmental conditions like temperature, pressure and sound and other features present in wireless sensors networks, with cooperatively transfer their data through out network communication present in the process of the each network specification process. Wireless sensors networks are achievable based on military applications present in the real time application development process in battlefield, today wireless

sensor networks are used in process business and industrial applications for accessing services from process application in detecting other allowed users entered into application development. Wireless sensor network

is a collection nodes with cooperative communication between systematic data transmission, in this communication every node must connect with other nodes and also connect with one sensors, each sensor network connect with realistic transmission with several ports present in the network, it consists radio

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15. Dr.D.Maheswari

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SALES DATA ANALYSIS USING HADOOP & SPARK

T. Srivignesh, Department of Computer Technology
Dr.N.G.P Arts and Science College

Dr.D. Maheswari, Department of Computer Technology
Dr.N.G.P Arts and Science College

ABSTRACT

Data is collected from point of sale transactions, inventory status and pricing, competitive intelligence, social media, weather, and customers (scrubbed of personal identification) and then pulled together on the Hadoop Platform, allowing for a centralized analysis of correlations and patterns that are relevant to improving business. In-store and online purchases, Twitter trends, local sports events, and weather buying patterns are analyzed by big data algorithms to build innovative applications that personalize customer experience while increasing the efficiency of logistics. Point of sale transactions are analyzed to provide product recommendations or discounts, based on which products were bought together or before another product. Predictive analytics is used to know what products sell more on particular days in certain kinds of stores, to reduce overstock and to remain properly stocked on the most in-demand products, helping to optimize the supply chain.

1. Introduction

Hadoop:

The Hadoop is distributed file system which is highly effective for process large amounts data using effective distributed techniques which takes use of the commodity instead of using the super computers to process the large amounts of data. The Hadoop is now the de facto standard for Big-Data Analysis.

Hadoop is the open source software which is developed and maintained by the Apache software foundation. The creation of the Hadoop is from the Google's white paper on the Map Reduce architecture with the distributed computing technology embedded to it. This made the founders of the Hadoop to invent it and now it's the revolution with the three important —V— the volume, variety and velocity. Now-a-days there are of options and more functionality in the Hadoop to use it with the various set

of tools to take the advantage of the Hadoop File System.

HDFS (Hadoop File System)

HDFS is the distributed file system for the Hadoop ecosystem it takes the take and distributes across it nodes for distributed computing access, the Hadoop is an analytical tool but not the dynamic storage database we load the large amount it, but not advisable to the small volumes of data into which makes it less efficient since relation database system quiet effective in the small amounts of data under Gigabytes.

HDFS uses block replication to reliably store very large files across multiple machines with two distinct pieces of software: The NameNode server, which manages the file system namespace and client access, and the DataNodes, responsible for serving read and write requests, as well as block creation,





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16. Dr.Rajeswari

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DESIGN OF LOW COST COGNITIVE RADIO PLATFORM FOR DEMONSTRATION AND TESTING PURPOSES

Gnaini. R¹, Tharani. C², Dr. Rajeswari. R³

¹(Student, Department of Computer Technology, Dr. N.G.P Arts & Science College)
²(Student, Department of Computer Technology, Dr. N.G.P Arts & Science College)
³(Assistant Professor, Department of Computer Technology, Dr.N.G.P Arts and Science College)

ABSTRACT:

Nowadays, wireless communication systems play an important role in our daily life. One of the most prominent wireless communication technologies is known as the cognitive radio technology. Cognitive radio is expected to be the next disruptive radio communication technology due to the fact that it may solve and overcome many of the issues affecting the current wireless communication systems. In order to understand how a cognitive radio system, subsystem, or algorithm behaves in realistic scenarios, an experimental platform is required. This paper presents a new design for a cognitive radio platform. The foremost objective of the novel design approach followed in developing the presented topic is to offer a low-cost and low- power solution that simplifies the demonstration and testing of cognitive radio communications.

Index Terms: Wireless, Communications, Microcontroller, Cognitive Radio, Spectrum, Sensing, Energy, Detection.

I. INTRODUCTION

With the swift growing demand of wireless applications, the efficient use of available spectrum is becoming a vital requirement for wireless system design, since spectrum is a finite resource [1],[2],[3]. Cognitive radio (CR) is a promising technology which provides a novel way to improve electro- magnetic spectrum utilization efficiency. There exists different definitions for the concept of cognitive radio; however, two common characteristics must be present in any cognitive radio namely automatic configurability and intelligent adaptive behavior of its operating characteristics in response to the changes in the cognitive radio environment [2]. That is, CR functionality requires the following capabilities [2]:

- Flexibility and agility, with the ability to change the operating constraints on the fly.
- Sensing, which is the ability to observe and measure the state of the environment in order for a CR device to change its operation accordingly.
- Learning, with the ability to modify internal operational behavior based on the analysis of the sensed input.

Design Motivation

The idea of cognitive radio led to a great interest in academic and industrial research; however, most of research studies and results which evaluate cognitive radios rely on theoretical analysis or computer simulations. In order to get a grip on how a cognitive radio system, subsystem, or





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17. Mrs.M.Rathi

MACHINE LEARNING IN HEALTH CARE
J.Vinitha¹, A.Kartheeka², M.Rathi³
^{1,2} III B.Sc Computer Technology,
³ Assistant Professor (SG), Department of Computer Technology
Dr.N.G.P Arts and Science College, Coimbatore,

ABSTRACT
Machine learning (ML) is a powerful and flexible tool that can be used to analyze and predict outcomes from biological and clinical data. ML models have the potential to improve healthcare efficiency in a number of ways. Algorithms that predict prognosis empower healthcare officials to allocate resources optimally and physicians to select better treatment options for patients. Diagnostic models can be used in screening, in risk stratification, and to recommend appropriate testing and treatment. This would decrease the burden on physicians, increase and expedite patient access to care, save resources, and reduce costs. This research work summarizes successful applications of machine learning methods in Healthcare Applications.

Keywords: Machine Learning, Diabetes, Prediction, ensemble model, Medical applications

I. INTRODUCTION
Machine Learning (ML) provides methods, techniques, and tools that can help solving diagnostic and prognostic problems in a variety of medical domains. ML is being used for the analysis of the clinical parameters and other combinations for prognosis, e.g. prediction of disease progression, for the extraction of medical knowledge for outcomes research, for therapy planning and support, and for overall patient management. ML is also used for data analysis, such as detection of regularities in the imperfect data, interpretation of continuous data used in the Intensive Care Unit, and for intelligent alarming resulting ineffective and efficient monitoring. The successful implementation of ML methods can help the integration of computer-based systems in the healthcare environment providing opportunities to facilitate and enhance the work of medical experts and ultimately to improve the efficiency and quality of medical care. This approach can be extended to handle cases where there is no previous experience in the interpretation and understanding of medical data.

ML algorithms improve and their applicability to healthcare broadens. It forms the basis of radiology tools such as image segmentation to isolate areas of interest. Increased capabilities of ML, however, may displace physicians from some of their roles. For instance, image-reading specialties such as radiology involve identifying patterns from medical images. Such tasks are suitable for ML as the data are consistent in format, and diagnoses often can be made from the images alone. Given equal accuracy to human assessment, algorithms would be advantageous in providing immediate results while reducing cost. Prognosis prediction includes approximating outcomes such as a patient's disease





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18. R.S.Padma priya

BREAST CANCER PREDICTION USING SVM CLASSIFIER AND KNN ALGORITHM

[1] R.S.Padma Priya,
Assistant Professor, Department of Computer Technology
Dr.N.G.P.Arts and Science College.

[2] K.Arthi, [3] P.Swetha
UG Final Year Student, Department of Computer Technology
Dr.N.G.P.Arts and Science College.

ABSTRACT:

Breast Cancer is one among the foremost exquisite and internecine disease among all of the diseases in life science . It is one among the crucial reasons of death among the females everywhere the world. We present a completely unique modality for the prediction of breast cancer and introduces with the Support Vector Machine and KNearest Neighbors which are the supervised machine learning techniques for Breast Cancer detection by training its attributes. The proposed system uses 10-fold cross validation to urge an accurate outcome. The Breast Cancer termed as Wisconsin breast cancer diagnosis data set is taken from UCI machine learning repository. The performance of the proposed system is appraised considering accuracy, sensitivity, specificity, false discovery rate, false omission rate and Matthews coefficient of correlation . The approach provides better result both for training and testing. Furthermore, the techniques achieved the accuracy of 98.57% and 97.14% by Support Vector Machine and K-Nearest Neighbors individually along with the specificity of 95.65% and 92.31% in testing phase.

I. INTRODUCTION

A recent statistics from World Cancer Research Fund International (WCRFI) [1] shows that Breast Cancer is that the most widely recognized cancer in ladies round the world. There are almost 1.7 million new cases which are detected in 2012 that signifies around 12 percent of altogether new cancer cases and 25 percent of all cancers in ladies. Breast Cancer outperformed the position of fifth for the rationale of death in ladies. In numerous nations with advanced technology in medical science, the 5-year survival rate of initial phase Breast Cancer is 80–90%, dropping to 24% for Breast Cancer analyzed at progressive phase. Breast cancer cells are found within the tissues of the breast. In very recent years there are numerous modalities are developed for the prediction of Breast cancer . In biopsy testing [2], the biopsy is occupied from the tissues of the breast. The test provides higher accurate result but the procedure to require the biopsy from breast is extremely painful and pathetic. So, the foremost of the patients aren't intrigued with this test. A mammogram [3] is the most generally used technique for the detection of breast cancer which provides the 2D projection images of the breast. There are two sorts of mammography techniques that are widely used. These are the screen-film





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19. Dr.P.Iswarya

DEVELOPMENT OF HUMANOID ROBOT

Barani, G,II B.Sc. Computer Technology,Dr. N. G. P. Arts and Science College

Pradeepa, M,II B.Sc. Computer Technology,Dr. N. G. P. Arts and Science College

Dr. P. Iswarya, Assistant Professor Department Of Computer Technology

Dr. N. G. P. Arts and Science College

ABSTRACT

This paper is about the development of humanoid robots that communicate and interact with the humans and participate in the human society. These type of robots have a human like body which provides a lot of non-verbal information and enable us to smoothly communicate with the robot. These humanoid robot autonomously interacts with humans by speaking and gesturing. Interaction between the humans and robot is achieved through a large number of interactive behaviors. Each interactive behavior is designed by using knowledge obtained through cognitive experiments and implemented by using situated recognition. The developed humanoid robot is tested based on its communication. The aim of this is to analyze human-robot interaction in terms of body movements using a motion-capturing system that allows us to measure the body movements in detail. Various experiments have been done to compare the body movements with subjective evaluation based on a psychological method. The results reveal the importance of well-coordinated behaviors as well as the performance of the developed interactive behaviors and suggest a new analytical approach to human-robot interaction.

INTRODUCTION

Nowadays robots become very powerful elements in industry because of their functionality and capability to perform many different tasks simultaneously. Moreover it does not need the common safety and comfort like human. Besides these industrial robots which are used for the various purpose, significant advancements have been made in the development of biologically inspired robots or social robots. Humanoid robots are the one with body shape built to resemble the human body. However the complexity of the human body such as the skeleton system, nerves

system cannot be built, the humanoids have some degree of freedom (DOF). It is very important to choose the number of DOF for each articulation where the

selection approach consists of analyzing the structure of the robot. Basically today's humanoid robots are nothing but walking and are not ready to serve the human daily needs. Though humanoids are neither intelligent nor autonomous, they are currently represented as one of the mankind's very impressive accomplishments. In the recent years manufacturing of various types of humanoid robots have obtained the attention of the world.





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20. V.Manimekalai

EYE GAZE COMMUNICATION SYSTEM

Prabhashri.N,II B.Sc Computer Technology,Dr.N.G.P Arts and Science College
Vijayalakshmi.T.V,II B.Sc Computer Technology,Dr.N.G.P Arts and Science College
V.Manimekalai,Assistant Professor,Department of Computer Technology
Dr.N.G.P Arts and Science College

Abstract— The primary objective of Eye gaze systematic review is to look at the effectiveness of eye-gaze control technology for facilitating communication across different social contexts for people with spastic paralysis, Amyotrophic lateral sclerosis, and significant physical disability. It is a direct vision controlled communication and control system. By watching control keys displayed on a screen, an individual can synthesize speech, control his environment (lights, appliances, etc.), operate a telephone, type and browse the web.

Also, Eye gaze system is being used to write books, attend school and enhance the quality of life of people with disabilities all over the world. It is also used in homes, care facilities, hospitals, and offices. Eye gaze communication is a potential porthole into current cognitive processes and communication through the direction of eyes which is faster than any other mode of human communication.

I. INTRODUCTION

The Eye gaze communication system is a boon for physically challenged people by using the process of eye-tracking. It helps them to connect with the real world and other people. It is the process of measuring the motion of an eye relative to the head. An eye tracker may be a device for measuring eye positions and eye movement. A person belonging to any age bracket can use this technique.

In this portion we are here to know about the working procedure, running of the system, skills need naked eye observation in the absence of move advanced technology.

II. HISTORY

1908: Tracking of eye movement during the reading process.
1937: First recording of eye movement.
1950 &

1960: Correlation between interest and gaze fixation.
1970: Provided better accuracy and able to separate the eye from head movement.
1980: Application of video-based eye trackers to human-computer interaction.
1990: Using eye-tracking to observe the reaction to internet content.
From the 2000s till today-special and providing insights in human

III. WORKING PROCEDURE

As a user sits ahead of the attention gaze monitor, a specialized video camera mounted below the monitor observes one among the user's eyes. Nothing is attached to the user's head or body. Sophisticated image processing software within the Eye gaze Systems computer continually analyses the video image of the attention and determines where the user is depending on the screen.





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21. Ms.S.Nithya Devi





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New strategies for Enhancing English Academic Writing Skill among Rural Learners

IMPARTING WRITING SKILLS THROUGH TASK-BASED LANGUAGE TEACHING FOR THE L2 RURAL STUDENTS

Ms.S.Nithya Devi, Dept.of English, Dr.N.G.P. Arts and Science College (Autonomous), Coimbatore.
Ms.P.Praniskaa, M.Phil. Scholar, Dept.of English, Dr.N.G.P. Arts and Science College (Autonomous), Coimbatore.

Abstract

Among the four skills of language acquisition, Writing is a practical task which represents all the other skills. Writing is the penultimate inventions in human history. It provides a standard permanent record of information, ideas, arguments, theories, feelings, explanations, and beliefs of mankind. Writing permits the humans to share their communication with future generations. Writing, therefore, has to be one of the necessary language skills for learning. It is a part in our day-to-day activity and the key element for the school and college students for their academic utilization. This paper focuses on how far the Task-Based Language Teaching (TBLT) helps the students in building up their academic writing. TBLT is an innovative approach in the development of Communicative Language Teaching (CLT). It is basically a classroom practice which alleviates the students to enhance their writing performance. It aims at providing opportunities for learners to experiment with and explore written language through learning activities that are designed to engage learners in the authentic, practical and functional use of language for meaningful purposes. The students will be assigned with individual tasks and each task focuses on the student's growth in academic writing. Moreover it focuses much on the tasks related activities where the students from rural areas would be practically active inside the classroom. Through this teaching methodology the students concern towards practicing writing skill is highly encouraged.

Keywords: Academic Writing, Classroom Activity, Individual Tasks, Rural Learners, Task-Based Language Teaching

DEVELOPING WRITING SKILLS

Ms.M.Nithyapriya, I – M.A English literature, Vellalar College for Women, Thindal, Erode.

Abstract

Language plays a crucial role in communication and English is no doubt the foremost and most important tool of communication all over the world. Students in India are exposed to their language studies right from their primary level. English is taught only as a second language in India and there is great difference between the city bred children and rural children adapting English language. Since 70% of the students in India are from rural background and most of them are first generation learners, they lack guidance of English language from their parents and others. City children are exposed to a lot of modules and they have the privilege of learning English through different methods. Special training is available in the city schools to improve the listening, speaking, reading and writing, whereas the rural students have only limited exposure. Analytical rubrics measured in writing features such as discourse, syntax, vocabulary, mechanics and language conventions. Writing dairy daily, listening objects in pictures, writing review of the recently watched movies, creating headlines from current affairs. Through this method writing skill can be developed among rural students. It is natural that the demand for communication is high in this ever-changing world.





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22. Dr.R.Vithya Prabha

ECLECTIC METHOD: DEVELOPING WRITING SKILLS IN L2 AT TERTIARY LEVEL

Ms.A.Govardhini, Ph.D. Research Scholar, Department of English, Dr.N.G.P Arts and Science College, Coimbatore, T.N, India. govardhini21@gmail.com.

Dr.R.Vithya Prabha, Professor in English, Department of English, Dr.N.G.P Arts and Science College, vithya.prabha@gmail.com.

Abstract

English as a second language has varied skills amongst writing is the toughest. To gain proficiency in writing, it requires appreciable efforts and continuous practice. Moreover in writing skills there are different aspects and approaches have to be thoroughly understood. As there are number of modern approaches in teaching L2, the students are really facing lots of impedimenta in developing their language skills, especially in writing skills. Since writing is a productive skill and it has to be learnt through the use of reading and other skills, because good reading practice suffices one's autonomy of lexical and grammatical skills. Activities through the combination of reading and writing, a learner can have a better understanding of the sentence structure, syntax and semiology. Teaching of writing skills depends on three various sub skills like; vocabulary, grammar and structure. One such method is an eclectic method which involves a combination of the audio lingual and cognitive techniques selected from the point of view of the age of the learner, his/ her proficiency level, the learner's need and the nature of the material to be taught. The present paper makes an attempt to blend more than two approaches in enhancing writing skills at tertiary level.

Key Words: Eclecticism, L2, Morphology, Language competency.

English has been used in many spheres; it starts from basic communication to higher education. Jack C. Richards suitably opines: "Having sketched some of the reasons for the current position of English as the world's most important second or foreign language, we can consider how this need is acknowledged as an educational reality" (3). Every language has its own features and development, since English is recognized as a global language.

As Shaik Mowla rightly cited the words of F.G. French: "No language ancient or modern can be compared with English in the number of geographical distribution of the homes, factories and offices in which the language is spoken, written or read;...Because of the spread of industrial development, science and technology, international trade and commerce, and the close interdependence of nations, English has become a world language" (qtd.7).

The position of English in the world has changed so greatly, and the number of L2 speakers has increased so rapidly that all the descriptions of the place of English among world languages need to be rewritten. Krishnanaswamy et al note: "English has been variously described as the 'window on the world', the 'language of development', the 'language of science and technology', the 'language of modernization', the 'language of research etc" (229).

Teaching and learning of language (L1/L2) not only requires proper methods and approaches, but also it needs physiological presumptions to stabilize the language teaching and learning. By understanding the physiological theories, a teacher can select a prompt stage; on it the provided learning materials can be given and taught. Leaving this thought and without knowing the children's development or growth, it is very problematic to train the students in gaining language skills. Nagarajan and Srinivasan rightly state: "Language development in children appears to be dramatic. It does, of course, depend upon physical maturation, like control of mouth and tongue. Language development passes through certain stages though it is rather difficult to distinguish them clearly" (123).





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23. Dr.S.Sudha

STRUCTURAL – ORAL APPROACH IN DEVELOPING WRITING SKILLS AMONG L2 LEARNERS

Ms. Abinaya.T, M.Phil., Scholar (English), Dr. N.G.P Arts and Science College, Coimbatore, Mail Id: sabinaya31@gmail.com, Mobile No: 9629439404.
Dr. S. Sudha, Assistant Professor in English, Dr. N.G.P Arts and Science College, Coimbatore, Mail Id: sudhasenthil2008@gmail.com, Mobile No: 9524003635.

Abstract
English occupies an important place in education as well as in the present society. Through English language teaching, in India, the learners are able to get broad knowledge about global society, culture, economy and so on. The Structural – Oral Approach is seen as a significant evolution in the field of language teaching, both in terms of language in use and in the development of language classroom setup. Language appears in several forms – in spoken word, in listening, in writing and reading. Teaching of writing skills requires a good understanding of both the vocabulary and the grammar rules. To develop a learner's vocabulary in second language learning, the Structural – Oral Approach is highly useful and may be an effective approach. The Structural – Oral Approach helps to develop writing skills and it gives opportunity to get acquainted with grammar and vocabulary skills, and they are important for developing communications skills, especially for writing and speaking. The article makes an attempt to educate grammar rules, use of syntax and structure of a sentence through the Structural – Oral Approach. Similarly, L2 learners can easily develop their writing skills rather than following any other methods.

Key Words: Structural – Oral Approach, Grammar, Writing skill, L2

Language is man's finest asset. The greatest gift that man got from god is language which helps him to think, to form a behavior and some mind activity. Man is social, because he uses language. We cannot think of a society without a language. Language is an inevitable key tool for the whole humanity to communicate their ideas, thoughts and feelings etc. with one another. Much Linguistics tries to trace the real origin and background of the human language, but all their efforts end in fragment and even remain inscrutability. The term 'origins of language', indicates that what we know about origins of language is not definite yet the search is still going on.

Writing is one of the language skills which have to be done very cautiously. Because it is a record left for others to see. A wrong speech may leave the speaker vulnerable only to the listeners at the time of speaking, whereas the writer leaves his mistakes on record for ever where all others may peruse and the writer's ignorance may be revealed to many. So, utmost care has to be taken while writing.

Reading and writing have close proximity in their process as they come under graphic motor Skills. The process of writing is in three stages namely, manipulation, structuring and communication. Teachers of English have to acquaint the students with this association so that they may aim for learning the language in its integration. Writing ability may be developed by giving more practices during the school period. Students have to be trained in 'Free Composition'. Care must be taken to ensure that the writing has reasonable flow, and exhibit a treatment of 'novel' ideas and a good 'organization' with proper 'spelling' and 'punctuation' and it should be compensated with equivalent information linguistically.

The Structural-Oral approach is also known as S-O approach, and is an alternative to the direct method. It is a result of the experiments done in the army camps during world War II. It is the method of presentation carefully carried out and graded grammatical structures of English in effective, meaningful situations, initially through speech and later through reading and particularly writing.

This approach as Kripa K. Gautam states "is based on the belief that language consists of 'structures' and that the mastery of these structures is more important than the acquisition of





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24. Dr.M.Marimuthu & Dr.K.Sankar

New strategies for Enhancing English Academic Writing Skill among Rural Learners

APPLICATION OF LINGUISTICS AND L1 AND L2 ACQUISITION THEORIES IN DEVELOPING WRITING SKILLS

Dr.K.Sankar, Assistant Professor, Department of English, Dr. N.G. P. Arts and Science College, Coimbatore, Mobile: 9943725557.

Dr.M.Marimuthu, Assistant Professor, Department of English, Dr. N.G. P. Arts and Science College, Coimbatore, Mobile: 9597136422.

Abstract

Language is a fundamental part of humans' activities, and without language it is hard to imagine the human society. In education, all the required information is transformed generation to generation only through language. And, it is imperative to record the actual happenings and thoughts, in this respect a proper method is vitally needed for teaching language skills even from the lower primary level onwards. Since it is the world of technology, it is possibly to gain good learning outcome. But, the problem is most of the institutions are still following the traditional methods and approaches. On the other side, the younger generation is more vibrant in utilizing the modern technologies than the teachers. It evidences that there is a gap between teachers and teaching methods. Besides, the students are also not interested in elevating their language skills, and they really don't have autonomy in writing skills. The present paper makes an attempt to identify the drawbacks of certain teaching methods, how that can be possibly given a better guidance, and adapting innovative techniques for developing writing skills through linguistics language acquisitions theories.

Key words: Linguistics, Acquisition, L1, L2, Approaches, Methods

Language is basically defined as a skill and it is not targeted to impart information and stuff to the learners. Mowla pertinently defines: "Language is a skill subject unlike history or physics, which are content subjects. But even a language like English is taught as a content subject by many teachers, as a body of information and a number of rules and definitions" (30). Language teaching is an endeavor to discover, develop and verify knowledge. Jack C. Richards suitably comments:

Language teaching is hence a complex issue, encompassing socio cultural linguistic, psycholinguistic, as well as curricula and instructional dimensions. Planning a successful language program involves consideration of factors that go beyond the mere content and presentation of teaching materials (11).

Any type of research in education requires conceptualization of the variables in a study, which facilitates effective planning of a methodology and effective measurement of the variables are involved in the process. Therefore an attempt has been made to conceptualize certain concepts in the present paper.

Content subjects such as Science, Social science etc., come under cognitive domain. Knowledge is acquired through reasoning or intuition in this domain. Knowledge is also acquired through learning or reading in the content-subjects. Poetry and aesthetics come under the affective domain as they affect and appeal the heart unlike the former. The last one is Psycho motor domain under which all skill-subjects like singing, dancing, swimming, playing, painting, drawing etc. are classified. Language is a skill hence it comes under this psychomotor domain.

Writing is the most difficult of all the language abilities to acquire and the learner needs a lot of sustained work and training in mastering the skill of writing. Writing requires certain skills, which have to be done very cautiously in every pace. A wrong speech may leave the speaker vulnerable only

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25. Dr.S.Sudha

EXPERIENCING ACADEMIC TENOR IN WRITING AMONG RURAL LEARNERS: SUPPOSITIONS AND PRACTICES

Mr.Anton Pushparaja.M, Ph.D. Research Scholar (English), Loyola College (Autonomous), Chennai, Mail Id: antonm.raja@gmail.com, Mobile No: 9080420463.

Dr.S.Sudha, Assistant Professor in English, N.G.P Arts and Science College (Autonomous), Coimbatore, Mail Id: sudhasenthil2008@gmail.com, Mobile no: 9524003635.

Abstract:

Academic writing suffers decisive drawback among Indian learners. Teaching academic writing needs regular efforts, continual interventions and constant feedback. Teachers, rather teaching academic writing, must allow learners to experience. Teaching academic writing is not a product but process. Academic writing is a progressive and prospective way of expression where learners' ideas are clearly and meticulously expressed so that national and international learning community could understand. Academic writing is to absorb the ideas and express the same in standard register. There are kinds of academic writing and so learners' awareness on academic writing must be practiced in real time experience. Any academic writers should actualize the ideas of the mind through following steps: planning, drawing an outline, absorbing the tone, choosing language style, point-of-view and approach to be inducted. It has a proper introduction, body of work and conclusion. Besides, academic writing is characterized by evidence-based arguments, precise word choice, logical organization, and an impersonal tone. So with all these presuppositions, learners are inducted with experiential learning where they actually experience the modules of academic writing where they are facilitated with constant feedback. Hence, how academic writing could be enhanced with experiential learning is the main focus of research paper.

KEYWORDS: academic writing, analysis, practice, intervention, awareness.

Language is an extraordinary gift of God to man. Language only makes the man fully human. Man, in the words of Aristotle, is a rational animal. Man has attained this rationality because he has the ability to reason, and this reasoning capacity depends on the bountiful benefit of the language. Language is a resort to man's aesthetic senses as he recites beautiful poems which engages his fellow humans in their leisure time and of course, academically also it is utilized. Spread of religions and religious harmony depends entirely on the language as all scriptures are put in language only.

Students of English as a second language are besieged with the skill of writing for academic purposes. Our students even studying English for 14 years at the time of getting their degree might not have been in speaking situations. But they cannot get a degree without in writing situation. Can we rightly argue with thumping hope that our graduates are good in writing, having this particular experience academically for around 14 years? Definitely not. The reason is that the questions in the university examinations are mostly not open-ended. Students may memorize most of the answers and even get first class. And, yet, they may not know what is coherence and cohesion in writing.

Reading and Writing skills are the fundamental skills for learning any language whereas rural students have only limited exposure to learn English. So, proficiency in writing in English as a second language is required.

The following activities may help students to get better on writing skills:

- Writing daily events
- Writing Day today experience





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26. MS.K. Nagalakshmi

PROGRESSIVE PHASE OF ACADEMIC WRITING METHODS AND NOVEL STRATEGIES FOR RURAL LEARNERS

Ms. Nagalakshmi K, Assistant Professor, Department of English, Dr. N.G. P. Arts and Science College (Autonomous), Kalapatti, Coimbatore – 48, Mail ID: nagaharini2011@gmail.com, Mobile: 89730 66956.

Abstract:

Writing skills require a lot of prerequisites in order to convert usual writing into academic purpose. According to Francis Bacon, *reading makes a full man, conference a ready man, and writing an exact man*. The fundamentals of writing skills must be taught to the students in school and college to obtain brownie points. This paper focuses the novel methods that come in the way of imparting writing skills for academic purpose for rural learners. The writing skill can be imparted through games by displaying picture in class and asking students to interpret. The teacher has to bear the parameters of the effectiveness of the skill in mind by means of introducing its rudiments to the rural learners. The basics of academic writing encompasses content, communication achievement, organization of thought, coherence and language. The play way of method of teaching and learning would fetch more interest in the mind of the learners. The teacher can teach the skeleton of writing letter, drafting mail with necessary salutation, and efficacies of filling in the notice to get the clear cut information about the area specified. Rural learners possess very elementary knowledge about writing skill, to wipe away their inhibition for writing; first and foremost they should be introduced with functionality of writing. Enhancing writing skills can be dealt with reading comprehension like fill ups, note completion. These methods bear the insights of brainstorming and planning for writing amidst rural learners.

Key Words: Brainstorming and planning, Displaying and interpreting picture, Indulging in team work.

Mahatma Gandhi says, Writing must be imparted to students from the rudimentary level. He also says writing should possess the importance of handwriting and also the sense it conveys to the receptors. According to Gandhi, education is very essential for one's survival. Of late, teachers encounter a lot of challenges in educating rural learners and crucial point rests in acquiring English, as a subject and as a survival language.

Modern teachers get the help of technologies to ease their teaching in class room especially when they teach English as a subject. They need to incorporate various games amidst their teaching to make the learners comfortable in learning and teaching English to the second language learners (L2). For instance, when they teach writing for academic purpose, the teachers need to inculcate the difference between the formal and informal writing. The positioning of

Dear Madam, Raja, Yours Sincerely, Yours obediently and so on.

Excellent writing skills can be obtained only when the learners practice it continuously and diligently. The introduction of Norman Lewis's *Word Power Made Easy* book would facilitate the learners to get familiarized with new dictions and synonyms. In order to make the writing better, the learners have to become the voracious readers. LSRW skills in English are interconnected and interlinked because each depends on one another.

The challenges in imparting the purpose of academic writing among rural learners comprehending the knowledge point of the learners, at times the teacher has to stoop down to the level of the students, acquiring competency of the learners, problem in understanding the writing modules such as syntax and grammatical structure from Language one and the second language. These problems and challenges can be rectified when the teacher maintains the close conduct with the





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27. Ms.M.Saranya

ELEVATING THE SKILLS OF RURAL LEARNERS WITH EFFECTIVE STRATEGIES OF ENGLISH LANGUAGE USING MEDIA AND NEWSPAPER

Ms.Saranya M, Assistant Professor, Department of English, Dr. N.G. P. Arts and Science College (Autonomous), Kalapatti, Coimbatore 48, Mail ID: saranyaeng88@gmail.com, Mobile: 9965763411.

Abstract

Writing is a prolific skill so it holds more significance. In our education system, writing skill is considered the most important skill to learn English as compulsory subject. Writing skill is an important skill for the communication in professional world so it must be taken care properly. The present study is about role of writing skill in one's career development, teaching methods of writing skills, difficulties faced by students and teachers in teaching-learning process of writing skill in English on the basis of informal interviews with teachers and students. Today conventional teaching methods are replaced with modern techniques which rely hugely upon media resources. Media is very helpful tool to improve the student's skills. Rural area students use media as an outstanding strategy for improving themselves. Language learning is a skill that can be perfected only through constant practice and continuous exposure to the target language. The available resources should be completely tapped so as to provide an encouraging atmosphere for learning and practicing the language. The Researcher suggests the rural area students to read newspaper on a daily basis and watch English channels which are well known of the news. This will help to the rural area people to understand and learn easily.

Keywords: Effective teaching practice, Innovative strategies, Teaching, Writing skill

Language plays a crucial role in communication and English is no doubt the most important tool of communication all over the world. Individually every person should strive hard to acquire good communication skills which are the most important fundamentals to shine in one's career. Since 70% of the students in India are from rural background and most of them are first generation learners, they lack guidance of English language from their parents and environment.

The city side children are exposed a lot of modules and they have the privilege of learning English through different methods. Special training is available in the city schools to improve the students' communication skills which are the basic skills for learning any language whereas the rural students have only limited exposure to learn English. The training provided in schools, is purely theoretical and bookish and English is taught only in the exam point of view. Hence, even after twelve years of learning English as a subject the students hesitate to communicate in English. This applies to city side children also, many of them are good in English but when it comes to the point of writing in English they hesitate to expose their skill. It is high time to motivate the students, right from their school by creating an awareness regarding the importance of English language. It is necessary that the teachers who teach English in rural areas should be committed and have an honest approach to equip the skills of the students. This paper deals with the effective methods which can be employed in teaching English to the rural students for their enhancement.

Media is the one basic skill which makes to improve communication skill. Nobody can speak a language without listening to it. Even an infant starts speaking in a particular language after listening to it for many months. As we adapt a syllabus in which writing of English is given much importance, our students are deprived of speaking abilities because they have not been properly guided in listening skills. This may be the basic reason why they have not been able to speak English in a proper manner.





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28. Ms.M.Kavitha

ADVANCED SCHOLASTIC WRITING METHOD FOR RUSTICS

Ms.M.Kavitha, M.A(CA), M.Phil., (Ph.D), Assistant Professor of English, Dr. N.G.P. Arts and Science College (Autonomous), Coimbatore – 641048.

Abstract:
Language is a sharp weapon which influence the people in this modern world amongst which Academic writing skill is considered as one of the concepts of creativity. It plays a predominant role in everyone's life but it is considered as a least of all the communication skills (LSRW). Even though there are many factors to focus about the importance of the writing skill, there are so many problems faced by the rustics. The first and foremost thing to show is the lack of parental supervision and guidance which is very important. Since most of the parents are illiterate, they are unable to realize the importance of education and also they do not understand the importance of communication skills. At the same time, children from backwoods who attend the school in their neighborhoods are not exposed to the same type of facilities and also not motivated as the city-bred children.

Introduction:
Language is a sharp weapon which influence the people in this modern world amongst which Academic writing skill is considered as one of the concepts of creativity. Despite the fact that writing is an important aspect of English proficiency, it is still considered as a least of all the communication skills (LSRW). Even though there are many factors to focus about the importance of the writing skill, there are so many problems faced by the rustics. The first and foremost thing to show is the lack of parental supervision and guidance which is very important. Since most of the parents are illiterate, they are unable to realize the importance of education and also they do not understand the importance of communication skills. At the same time, children from backwoods who attend the school in their neighborhoods are not exposed to the same type of facilities and also not motivated as the city-bred children. This article makes an attempt to enhance the power of writing skills through motivation and proper practice.

Motivation is the backbone for each and everyone's success. The city-bred children get motivated through two ways:

- 1) **Instrumental motivation** - Learning a language only for rewards is instrumental motivation
- 2) **Integrative motivation** - Urge to be part of the community which is so strong that drives the child to pick up the language with perfection.

The children in rural areas lack this type of motivation. This happens because in India 70% of the students are from rural background and also first generation learners, so they lack guidance and motivation from their parents and others. So when the children from rural areas goes to city to pursue their higher education, they face lot of problems in handling technological methods or otherwise called as smart ways of learning.

In today's scenario, most of the schools teach English as one of the syllabus without realizing its importance. So the existing methods followed at rural schools are not enough to train the students to communicate effectively in English. In such cases, the students from rural area who take up professional courses face a lot of difficulties. As there is an increase in the ratio of rural students





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29. B. Sivaranjani and Dr.C.Kalaiselvi

The image shows the cover of a book titled "National Seminar on Computing Platforms for Biological Big Data Analytics (NSCB-2020)". The cover is blue with white and yellow text. At the top left is the logo of Dr. N.G.P. Arts and Science College. The title is prominently displayed in the center. Below the title, it mentions the date "February 05-06, 2020" and the sponsor "Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India, New Delhi". The editors are listed as Dr. R. Rajesh Kanna and Dr. J. Renga Ramanujam. The background features faint icons related to computing and biology.

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RETINA MATCH BASED ON IMPROVED SUPPORT VECTOR MACHINE (ISVM) USING FUZZY CLUSTERING

H. Sivarani¹, Dr. C. Kalasevel²
¹Ph.D Scholar, Tirupur Kumaran College for Women, Tirupur, India
²Assistant Professor, Dr. N.G.P. Arts and Science College, Coimbatore, India
Head & Associate Professor, Tirupur Kumaran College for Women, Tirupur, India

ABSTRACT:

Nowadays, the development of automatic retinal diseases diagnosis systems based on image processing has shown their potential for clinical practice. However, the accuracy of these systems is often compromised, mainly due to the intrinsic difficulty in detecting the abnormal structures and also due to deficiencies in the image acquisition which affects image quality. Further, with noise being present in the images, retinal matching is difficult to be analyzed. In this work new image denoising is performed based on the clustering algorithm. The proposed fuzzy clustering algorithm finds the similarity between the retina noisy and un-noisy pixels. From this noises presented in the samples are removed by using the fuzzy clustering. If the noises are removed from the samples then dimension reduction initializes the Mutual Information (MI) optimization as a coarse localization process, which narrows the optimization domain and avoids local optima. In addition, proposed work nearest template of the retina image is performed by using the Improved Support Vector Machine (ISVM) method has been used with area-based registration, providing a robust approach. To the best of knowledge, this is the first template matching algorithm for retina images with small template images from unconstrained retinal areas.

Keywords: Retina image template matching, Noise removal, Fuzzy clustering, Improved Support Vector Machine, teleophthalmology, dimension reduction, mutual information, health monitoring

1. INTRODUCTION

Teleophthalmology is gaining momentum as an effective eye care delivery method worldwide. In many developing countries, teleophthalmology is being utilized to provide quality eye care to the underserved urban population and the underserved rural population. Over the years, technological innovations have led to improvement in evidence-based teleophthalmology. Teleophthalmology has evolved from a research tool to a clinical application. Teleophthalmology produces the desired clinical outcome as the telemedicine system. Remote portals allow specialists to provide care over a larger region, thereby improving health outcomes and increasing accessibility of specialty care to a larger population. A high satisfaction level and acceptance is reported in the majority of studies because of increased accessibility and reduced traveling cost and time. Considering the improved quality of care and patient satisfaction reports from these telemedicine services, this paper explores how teleophthalmology can improve patient outcomes. Teleophthalmology provides an easy, effective way to diagnose many eye diseases and ultimately to preserve a patient's eyesight. In retina, there has been a trend toward teleophthalmology, particularly diabetic retinopathy and retinopathy of prematurity (ROP) screenings, especially in areas where retinal specialists are not available. In this part, the challenges of retinal image matching and registration have been addressed to enable teleophthalmology applications. In this paper, a proposed new method for localizing the optic disc in retinal images. Localizing the optic disc and its center is the first step of vessel segmentation, disease diagnosis, and retinal recognition algorithms. In [2], we reviewed the current evidence on the critical factors and characteristics of ocular telemedicine programs for DR in the following categories: image gradability, mydriasis, sensitivity





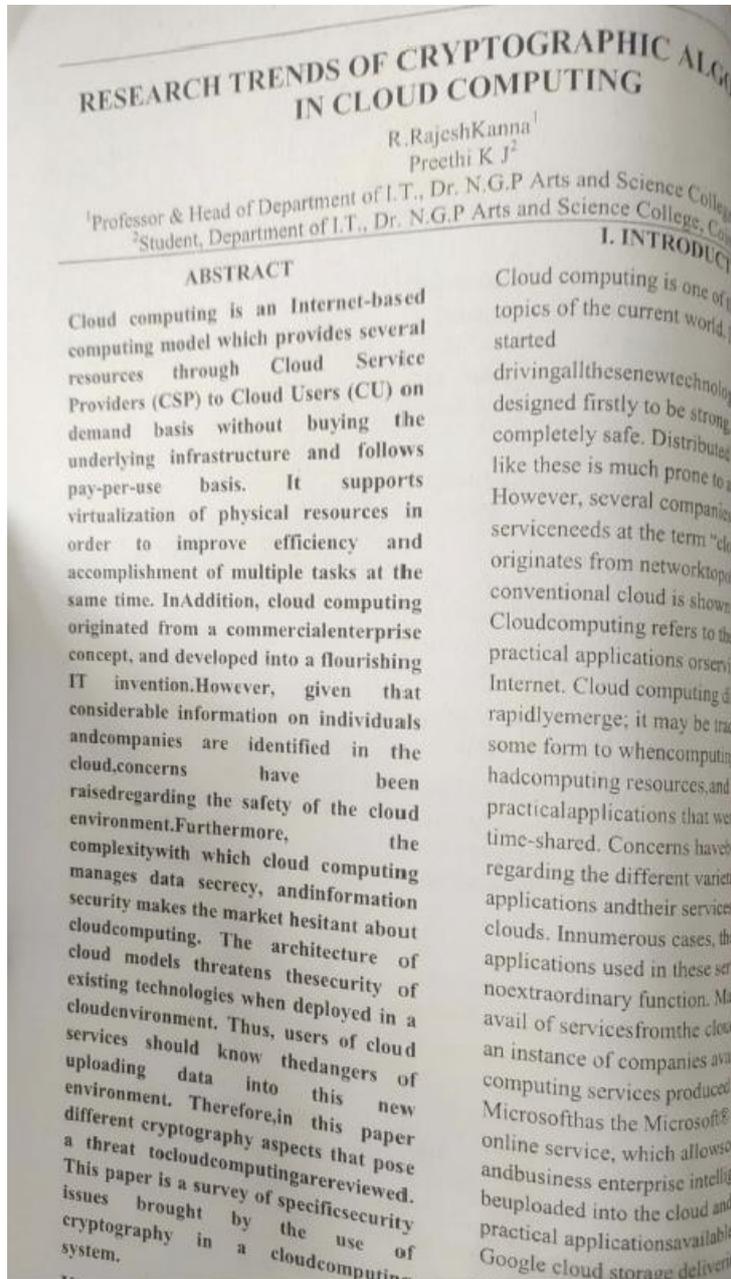
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30. R.Rajesh Kanna





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31. Rekha S

A STUDY ON BIG DATA ANALYTIC IN AGRICULTURE

Rekha S¹
Arikaram R² and Sneha K³

¹Assistant Professor, Department of Information Technology, Dr. N.G.P Arts and Science college, Coimbatore
²UG Student, Department of Information Technology, Dr. N.G.P Arts and Science college, Coimbatore
³UG Student, Department of Information Technology, Dr. N.G.P Arts and Science college, Coimbatore

ABSTRACT
The role of big data in Agriculture provides an opportunity to increase economic gain of the farmers by undergoing digital revolution. A huge repository of terabytes of data is generated each day from modern information systems and digital technologies such as Internet of Things and cloud computing. Analysis of these massive data requires a lot of efforts at multiple levels to extract knowledge for decision making. Therefore, big data analysis is a current area of research and development in agriculture. This paper is aiming to find climate changes using big data tool like hadoop, spark and by algorithms for decision making for farming. The main objective of this paper is how data analytics using in agriculture.

Keywords: Big data, Big data tools, climate change prediction model.

INTRODUCTION
BIG DATA is used to describe a collection of huge data and yet growing exponentially with time. The data are found in three form

1. Structure
2. Unstructured
3. Semi structure. In digital world, data are generated from various sources and the fast transition from digital technologies has led

to growth of big data. Formally, it is defined from 3Vs to 4Vs. 3Vs refers to volume, velocity, and variety. Volume refers to the huge amount of data that are being generated everyday whereas velocity is the rate of growth and how fast the data are gathered for being analysis. Variety provides information about the types of data such as structured, unstructured, semistructured Etc. Tools used in big data are hadoop, spark, map reduce etc.

Big data analytics have been rapidly developing along with the emerging needs of big data technologies in numerous subjects. The accessibility, availability and exponentially growing quantity of big data have further promoted the corresponding technological advancements and practical implementations.

Worldwide Google Trends of Big Data

Fig.1 graph of big data trending

II SIGNIFICANCES OF SMART FARMING

- Reducing cost production
- Increasing quality and quantity of crops with less time





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32. S. Rekha & Dr.C. Kalaiselvi


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SCHEDULING ALGORITHM WITH PARTICLE SWARM OPTIMIZATION (PSO) IN CLOUD COMPUTING SYSTEMS

¹S.Rekha, ²Dr.C.Kalaiselvi

¹Ph.D.Research Scholar, Department of computer science, Tirupur kumaran college for women, Tiruppur.

²Assistant Professor, Department of IT, Dr.N.G.P. Arts and Science college, Coimbatore.

E-mail: rekhaishanth@gmail.com

Head and Associate professor, Dept of Computer Applications, Tirupur kumaran college for women, Tiruppur

E-mail: kalaic29@gmail.com

ABSTRACT:

This article investigates in cloud computing systems about problem of delay optimal Virtual Machine (VM) scheduling holds constant resources with full infrastructure like CPU, memory and storage in the resource pool. Cloud computing offers users with VMs as utilities. Cloud consumers randomly demand different VM types over time, and the usual length of the VM hosting differs greatly. A scheduling algorithm for a multi-level queue divides the prepared queue towards lengthy and various queues. System is allocated with single queue in to several longer queues. The systems are allocated to one queue indefinitely, usually on any basis of process property, like memory size, process priority, or process sort. Every queue will have its self-algorithm for scheduling. Likewise, a system that's taking in a less preference queue is so lengthy, a high-priority queue can be transferred. Using Particle Swarm Optimization Algorithm (MQPSO), Multi-level queue scheduling has been done. To evaluate the solutions, it explores both Shortest-Job-First (SJF) buffering and Min-Min Best Fit (MMBF) programming algorithms, i.e., SJF-MMBF. The scheme incorporating the SJF-ELM-specific scheduling algorithms depending SJF buffering and Extreme Learning Machine (ELM) is also being proposed to prevent work hunger in an SJF-MMBF system. Furthermore, the queues must be planned, which is usually used as a preventive fixed priority schedule. The results of the simulation show that the SJF-ELM is ideal inside strong duty as well as maximum is environment dynamically, with an efficient average employment hosting rate.

STUDY OF DATA MINING

M.MohamedAnas, J.Shubham and Nanfalahamed

UG scholar, Department of Computer Science and Application, Sri Krishna Arts and Science College, Coimbatore.
mohamedanas222000@gmail.com, shubhamrockz17@gmail.com and 6shakti.nyys@gmail.com

ABSTRACT:

The main reason of selecting Data mining is to inform the people of how data's are processed and how larger set of data's are solved using patterns. They were considered illegal at the early periods but nowadays they are considered a noble field since the usage of probability it become a suitable for AI's since they want it to make it realistic. They have been even used in the field of medical, farming and agriculture etc...wherever there is digital data there is presence of data mining process. The paper also describes what are the problems faced during the processing the data and it also describes the recent advancement in AI. There are some disadvantages since every technologies has their downfall as well as their peak.

A STUDY OF COMPLEXITY SECURITY ALGORITHM FOR WIRELESS SENSOR NETWORKS

¹Jothilakshmi, ²Dr.S.Subbiah,

³Research Scholar, Department of Computer Science

⁴Asst. Professor, Department of Computer Science

¹Vivekanandha College of Arts & Sciences for Women (Autonomous), Namakkal-637 205,

²Sri Krishna Arts and Science College, coimbatore Tamil Nadu, India

jothividhula@gmail.com, ³subbimaren@yahoo.com

ABSTRACT:

Wireless Sensor Networks are used for different sensitive applications in the vein of in military operations, health care and for surveillance in smart cities etc. Thus security in WSN is an important concern which provides

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33. B.Sivaranjani

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sufficient water if the necessary conditions are not satisfied. The solution preferred is to maintain the stable growth of the crops that directly increases the yield.

IMAGE DENOISING USING IMPROVED SUPPORT VECTOR MACHINE (ISVM) – A CLUSTERING METHOD

¹B.Sivaranjani, ²Dr.C.Kalaiselvi

¹PhD Scholar, Tirupur Kumaran College for Women, Tirupur, India

¹ Assistant Professor / IT, Dr.N.G.P. Arts and Science College, Coimbatore, India

²Head & Associate Professor, Tirupur Kumaran College for Women, Tirupur, India.

ABSTRACT:

Nowadays, the development of automatic retinal diseases diagnosis systems based on image processing has shown their potential for clinical practice. However, the accuracy of these systems is often compromised, mainly due to the intrinsic difficulty in detecting the abnormal structures and also due to deficiencies in the image acquisition which affects image quality. Further, with noise being present in the images, retinal matching is difficult to be analyzed. In this work new image denoising is performed based on the clustering algorithm. The proposed fuzzy clustering algorithm finds the similarity between the retina noisy and un-noisy pixels. From this noises presented in the samples are removed by using the fuzzy clustering. If the noises are removed from the samples then dimension reduction initializes the Mutual Information (MI) optimization as a coarse localization process, which narrows the optimization domain and avoids local optima. In addition, proposed work nearest template of the retina image is performed by using the Improved Support Vector Machine (ISVM) method has been used with area-based registration, providing a robust approach. To the best of knowledge, this is the first template matching algorithm for retina images with small template images from unconstrained retinal areas.

STUDY ON MACHINE LEARNING

Dr.R.Khanchana,

Associate Professor, Department of Computer Science, M. Kayalvizhi, D. Ranjani,

UG Student, Department Of Computer Science,

Sri Ramakrishna College Of Arts and Science for Women, Coimbatore.

khanchana@sru.ac.in, m.kayalmuna@gmail.com, ranjanid1527@gmail.com

ABSTRACT-

Nowadays, large amount of data is available everywhere. This can be achieved through data mining and machine learning. Machine learning is an integral part of artificial intelligence, which is used to design algorithm based on the data trends and historical relationships between data. The objective of this briefing is to present an overview of the machine learning techniques currently in use or in consideration at statistical agencies worldwide. Machine learning is the scientific study of algorithm and statistical models that computer system use to perform specific task without using explicit instructions, relying on patterns and inference instead. It is seen as a subset of Artificial Intelligence.





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34. R.Rajesh Kanna

The image shows the cover of a book titled "National Seminar on Computing Platforms for Biological Big Data Analytics (NSCB-2020)". The cover is blue with white and yellow text. At the top left is the logo of Dr. N.G.P. Arts and Science College. The title is prominently displayed in the center. Below the title, it mentions the date "February 05-06, 2020" and the sponsor "Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India, New Delhi". The editors are listed as Dr. R. Rajesh Kanna and Dr. J. Renga Ramanujam. The cover also features several circular icons representing data, technology, and biology.

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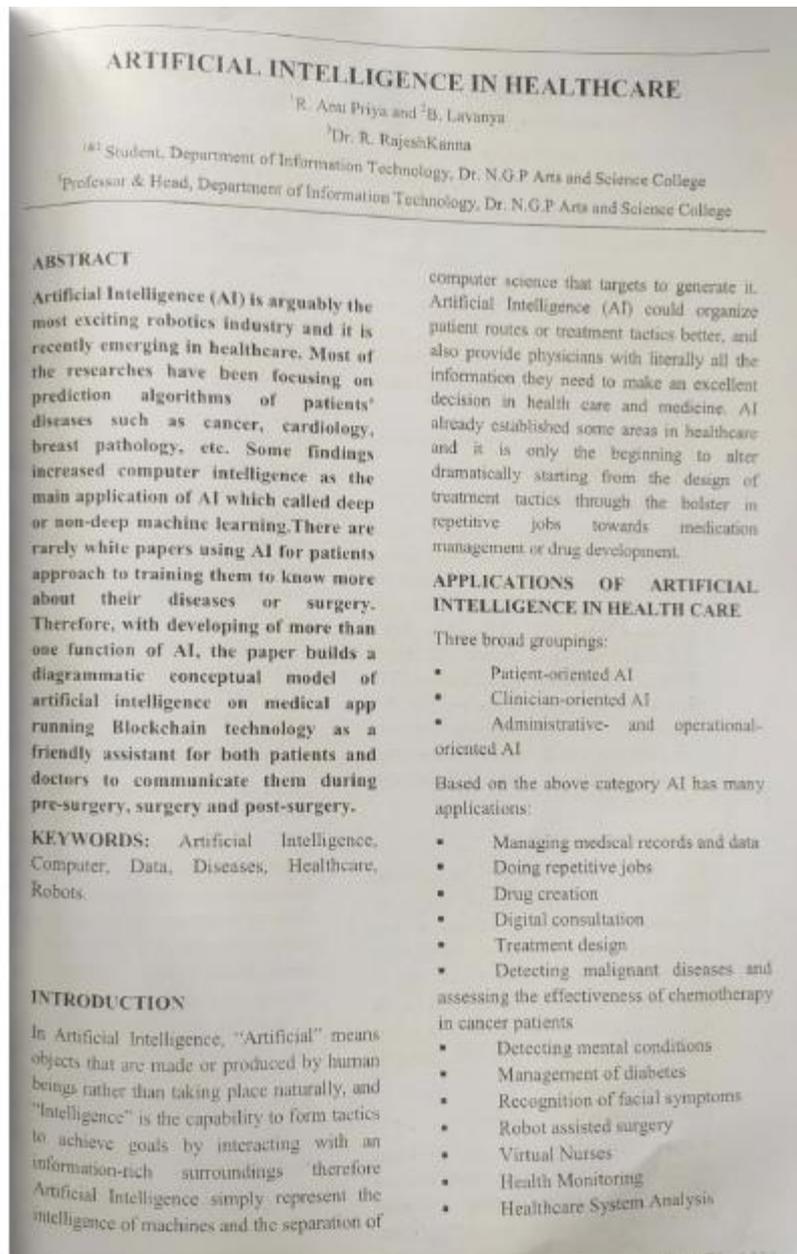


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35. Dr.C.Kumuthini & K. Gomathy

IMPROVING DATABASE SECURITY IN CLOUD COMPUTING

^[1]Dr.C.Kumuthini, ^[2]Praveen Vijayakumar, ^[3]S. Reneesha ^[4]K.Gomathy

^[1]Associate Professor, Dr. NGP Arts and science college, Coimbatore.

, ^{[2][3]} Students, Department of Computer Applications,

Dr. NGP Arts and science college, Coimbatore.

^[4]Assistant Professor, Dr. NGP Arts and science college, Coimbatore.

ABSTRACT— Cloud computing is a technology that promotes various configurable resources in which the data is stored and managed in a decentralized manner. However, since the data is out of the owner's control, concerns appear regarding data confidentiality. Encryption techniques have previously been proposed to provide users with confidentiality in terms of outsourced storage; however, many of these encryption algorithms are weak, enabling data security to be imposed simply by an algorithm. We propose a combination of encryption algorithms and a distribution system to increase database confidentiality. This scheme divides a database across the cloud based on the level of security provided by the encryption algorithm utilized. We compare the advantages of our scheme with other existing algorithms and claim that our scheme offers a highly secure approach that provides users with data confidentiality and adequate performance.

Keywords— Cloud Computing, encryption, data privacy, decryption algorithm.

I. INTRODUCTION

In cloud context, the confidential and critical information is stored across the cloud. A recent report by the Cloud Security Alliance lists data loss and leakage as one of top security concerns in the cloud. Recent laws, regulations and compliance frameworks compound the risks; offending companies can be held responsible for the loss of sensitive data and may face heavy fines over data breaches. To lose data security practices also harm on a personal level. Lost or stolen medical records, credit card numbers or bank information may cause emotional and financial ruin. Sensitive data stored within cloud environments must be safeguarded to protect its owners. Ensuring the confidentiality of information requires the best data management choices like only the authorized party can access the original

plain text. We propose the solution for these choices that removes the third-party involvement. The previously designed architecture for this is Proxy Less architecture (PLAC), in which the proxy server between the client and database is removed. The PLAC architecture has two problems. First is single point failure (means that data will be lost if the system failure occurs due to some problems) and second is bottleneck (too many request coming for same operation). Due to these drawbacks the performance of cloud is decreased. To overcome these issues the DD-PLAC (Distributed Database-Proxy Less Architecture) is proposed. This architecture does not introduce any intermediary proxy server between the client and cloud database. In this distributed cloud, data is distributed across the cloud. The benefit of storing data on distributed database is it





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36. Dr.A. Nirmala

MAP-REDUCE TECHNIQUE FOR EFFICIENT BIG DATA SEARCH PROCESSING

Naveen kumar N, Akash G, DR.A.Nirmala

Department of Computer Applications

Dr.N.G.P. Arts and Science College (Autonomous)

Coimbatore

ABSTRACT

Map Reduce is a programming model and an associated implementation for processing and generating large data sets. Users specify a *map* function that processes a key/value pair to generate a set of intermediate key/value pairs, and a *reduce* function that merges all intermediate values associated with the same intermediate key. Our implementation of MapReduce runs on a large cluster of commodity machines and is highly scalable: a typical MapReduce computation processes many terabytes of data on thousands of machines. Programmers find the system easy to use: hundreds of MapReduce programs have been implemented and upwards of one thousand MapReduce jobs are executed on Google's clusters every day. In this paper, we have proposed data reduction technique, which help to remove duplicate or redundant data among huge amounts of data generated from internet.

Keywords: *Large-scale dynamic data, Map-Reduce, Big Data, Hadoop, Internet, Duplicate data, Reduction technique.*

1. Introduction

Over the past five years, the authors and many others at Google have implemented hundreds of special-purpose computations that process large amounts of raw data, such as crawled documents, web request logs, etc., to compute various kinds of derived data, such as inverted indices, various representations of the graph structure of web documents, summaries of the number of pages crawled per host [1], the set of most frequent queries in a given day, etc. Most such computations are conceptually straightforward. However, the input data is usually large and the computations have to be distributed across hundreds or thousands of machines in order to finish in a reasonable amount of time. The issues of how to parallelize the

computation, distribute the data, and handle failures conspire to obscure the original simple computation with large amounts of complex code to deal with these issues [2].

As a reaction to this complexity, we designed a new abstraction that allows us to express the simple computations we were trying to perform but hides the messy details of parallelization, fault-tolerance, data distribution and load balancing in a library.

Our abstraction is inspired by the *map* and *reduces* primitives present in Lisp and many other functional languages. We realized that

most of our computations involved applying a *map* operation to each logical record. in our input in order to compute





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37. Dr.A. Nirmala

APPLICATIONS OF DATA MINING TECHNIQUES IN HEALTHCARE AND PREDICTION OF HEART ATTACKS

Dhivya E, Sowthariya D, DR.A.Nirmala

Department of Computer Applications

Dr.N.G.P. Arts and Science College (Autonomous), Coimbatore.

Abstract :

The healthcare environment is generally perceived as being 'information rich' yet 'knowledge poor'. There is a wealth of data available within the healthcare systems. However, there is a lack of effective analysis tools to discover hidden relationships and trends in data. Knowledge discovery and data mining have found numerous applications in business and scientific domain. Valuable knowledge can be discovered from application of data mining techniques in healthcare system. In this study, we briefly examine the potential use of classification based data mining techniques such as Rule based, Decision tree, Naïve Bayes and Artificial Neural Network to massive volume of healthcare data. The healthcare industry collects huge amounts of healthcare data which, unfortunately, are not "mined" to discover hidden information. For data preprocessing and effective decision making One Dependency Augmented Naïve Bayes classifier (ODANB) and naive credal classifier 2 (NCC2) are used. This is an extension of naive Bayes to imprecise probabilities that aims at delivering robust classifications also when dealing with small or incomplete data sets. Discovery of hidden patterns and relationships often goes unexploited. Using medical profiles such as age, sex, blood pressure and blood sugar it can predict the likelihood of patients getting a heart disease. It enables significant knowledge, e.g. patterns, relationships between medical factors related to heart disease, to be established.

INTRODUCTION:

Knowledge discovery in databases is well-defined process consisting of several distinct steps. Data mining is the core step, which results in the discovery of hidden but useful knowledge from massive databases. A formal definition of Knowledge discovery in databases is given as follows: "Data mining is the non trivial extraction of implicit previously unknown and potentially useful information about data" [1]. Data mining technology provides a user-oriented approach to novel and hidden patterns in the data. The discovered knowledge can be used by the healthcare administrators to improve the quality of service. The discovered knowledge can also be used by the medical practitioners to

reduce the number of adverse drug effect, to suggest less expensive therapeutically equivalent alternatives. Anticipating patient's future behavior on the given history is one of the important applications of data mining techniques that can be used in health care management.

A major challenge facing healthcare organizations (hospitals, medical centers) is the provision of quality services at affordable costs. Quality service implies diagnosing patients correctly and administering treatments that are effective. Poor clinical decisions can lead to disastrous consequences which are therefore unacceptable. Hospitals must also minimize the cost of clinical tests. They can achieve these results by employing





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38. Dr.A. Nirmala

INTERNET OF THINGS (IOT): DEFINITIONS, CHALLENGES AND RECENT RESEARCH DIRECTIONS

Preethika P, Thaarani B, Mounica E, Nivetha E, DR.A.Nirmala

Department of Computer Applications

Dr.N.G.P. Arts and Science College (Autonomous)

Coimbatore.

ABSTRACT:

In this paper, we seek to highlight the concept of Internet of Things (IoT) in general, as well as reviewing the main challenges of the IoT environment by focusing on the recent research directions in this topic. Recently, IoT has emerged as a new technology that is used to express a modern wireless telecommunication network, and it can be defined as an intelligent and interoperability node interconnected in a dynamic global infrastructure network, also it seeks to implement the connectivity concept of anything from anywhere at anytime. Indeed, the IoT environment possesses a large spectrum of challenges has a broad impact on their performance, which can be divided into two categories, namely, i) General challenges: such as communication, heterogeneity, virtualization and security; and ii) Unique challenges: such as wireless sensor network (WSN), Radio Frequency Identification (RFID), and finally Quality of service (QoS) that is considered as a common factor between both general and special challenges. In addition, this paper highlights the main applications of the IoT.

INTRODUCTION :

Today, we are living in the era of smart technologies which represents a "ubiquitous computing" or "web 0.3". Internet of Things (IoT) has emerged strongly as a more prosperous area to express this kind of a new technology. It is not the first technology in this field, but also the cloud computing technology has been used to represent the ubiquitous computing world. In the seventh in the series of ITU Internet Reports originally it was launched in 1997 under the title "Challenges to the Network" [1], and it was first coined by Kevin Ashton in the RFID journal 1999 [2], In 2005 this name was changed to "Internet of things". The vision of IoT according to Kevin's vision was to enable networked devices to propagate their information about physical world objects through the

web. In recent years, the most of the IoT proposed architectures are used, web semantic to publish information through the social networks; for instance, the iPhone has innovated service is Nike + iPod to record information and published it on the social networks and the social network friends [3].

Actually, the definition of IoT varies based on who you talk, but formally, it can be defined as a dynamic global network infrastructure with self-configuration and interoperable communication. Simply, IoT means the ability to make everything around us starting from (i.e. Machine, Devices, Mobile phone and Cars) even (Cities and Roads) are expected to be connected to the Internet with an intelligent behavior and taking into account the existence of the kind of autonomy and privacy. Meanwhile, the IoT environment





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39. K.Kavitha

RUZICKA SIMILARITY BASED TWO FACTOR USER AUTHENTICATIONS FOR SECURITY ENHANCEMENT IN CLOUD DATA SERVICES

K.Kavitha

Dr.N.G.P.Arts and Science College

Abstract

Cloud computing is a standard architecture for providing internet-based computing services over the internet. In cloud, security is a major issue for preserving the data from illegal user access. Authentication allows only the authorized users to access or store the data in a cloud. However, existing methods failed to improve authentication accuracy. A Random Key Generation based Ruzicka Similarity Two Factor User Authentication (RKG-RSTFUA) method is introduced for improving the cloud security with higher authentication accuracy. An RKG-RSTFUA method comprises two phases, namely the registration phase and authentication phase. In the registration phase, the cloud user registers their details to the cloud server. Then the cloud server randomly generates a public key and private key (i.e., user ID and password) to the cloud user. Whenever a cloud user wants to access the data or store the data, Ruzicka Similarity-based Two Factor User Authentication is to be carried out. In the first level, cloud user has to get logged in with their user ID and password. When the information is matched, second level authentication is carried out. In second level authentication, the security question which was asked in the registration phase is given to cloud user. The cloud server uses the Ruzicka Similarity for matching the security question with the information stored in the cloud server database. If these two factors get matched, the cloud server grants the requested services to the user. This shows the authorized users only access the various services from the cloud server. Otherwise, the cloud user is said to an unauthorized user. This helps to improve the data confidentiality rate. Experimental evaluation of RKG-RSTFUA method and existing methods are carried out with different factors such as authentication accuracy, authentications time and data confidentiality rate with respect to a number of cloud users and data. The experimental results show that the RKG-RSTFUA method obtains higher authentication accuracy and data confidentiality rate with minimum authentication time than the other state-of-the-art-methods.

Keywords: Cloud, user authentication, Random Key Generation, Two Factor User Authentication, Ruzicka Similarity

1. Introduction

Cloud computing provides flexible access through the internet-based computing to users. As the users communicate with the cloud, security is an essential issue for protecting the data from unauthorized users to enter and

access the data. In order to preserve the unauthorized access in the cloud, authentication is performed for verifying a user's identity. In a cloud, authentication of user is a major factor since it enhances the communication security. Several methods have been introduced to authenticate the users in a





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40. C.V.Banupriya & Dr.D.Deviaruna

EPILEPSY SEIZURE DETECTION IN EEG SIGNAL USING K-MODES CLUSTERING TECHNIQUE

C.V.Banupriya¹, Dr.D.Deviaruna²

¹ PhD Scholar, Dr.NGP Arts and Science College, Department of Computer Science, Coimbatore, India

² Assistant Professor, Dr.NGP Arts and Science College, Department of Computer Applications, Coimbatore, India

Corresponding Author: banupriya.venkat@gmail.com , drdeviaruna@drngpasc.ac.in

Abstract— Epilepsy is a constant neurological disorder of the brain, described by ordinary seizures, i.e., uneven activities. Seizure is the most essential signal of epilepsy, which is introverted of the most predictable neurological disorders. An electroencephalogram (EEG) is an experiment away used to evaluate up the electrical movement in the brain, and is widely used in the recognition and study of epileptic seizures. Thus, it is particularly important to a quantitative performance to normally clustering the epileptic free and epileptic brain activities. Several techniques have been developed for obdurate out the important features of seizures present in EEGs. This structure move toward is evaluated an extorting the attributes of EEG signals using wavelet transform coefficients and unsupervised learning technique like clustering the data using K- Mode Clustering. The performance of the Clusters are analyzed and examined that out performs the K-Mode Clustering in parameter measures.

Keywords— K-mode, EEG, Seizures, Wavelet, Clustering

1.INTRODUCTION

Epilepsy is a stable neurological disorder of the brain that affects more or less 50 million people worldwide. According to the World Health Organization (WHO), epilepsy is characterized by frequent seizures, which are goal reactions to sudden, usually succinct, too much electrical discharges in a group of brain cells [1]. In the structure of epilepsy examining, two various categories of seizure cover to be believed, namely behavioral and electrographic. A behavioral seizure is characterized as the medical manifestations of epilepsy, as assumed by the patient, seen by an observer, or recorded on video. An electrographic (or electroencephalographic (EEG)) seizure is

identified as an abnormal bursting EEG pattern. In numerous cases, there is dissociation between behavior and EEG signals [2]. In sustain types of epileptic seizures can occurred at all ages. Common epileptic seizures can be subdivided into nonexistence (petit mal) and tonic-clonic seizures [3].

In epilepsy the regular pattern of neuronal movement becomes disturbed, causing weird feelings, feelings, and actions, or occasionally convulsions, muscle spasms and loss of perception [4]. There are mixtures of achievable sources of epilepsy. Something that alerts the normal sample of neuron activity ranging from illness to brain damage to abnormal brain improvement can guide to seizures [5].





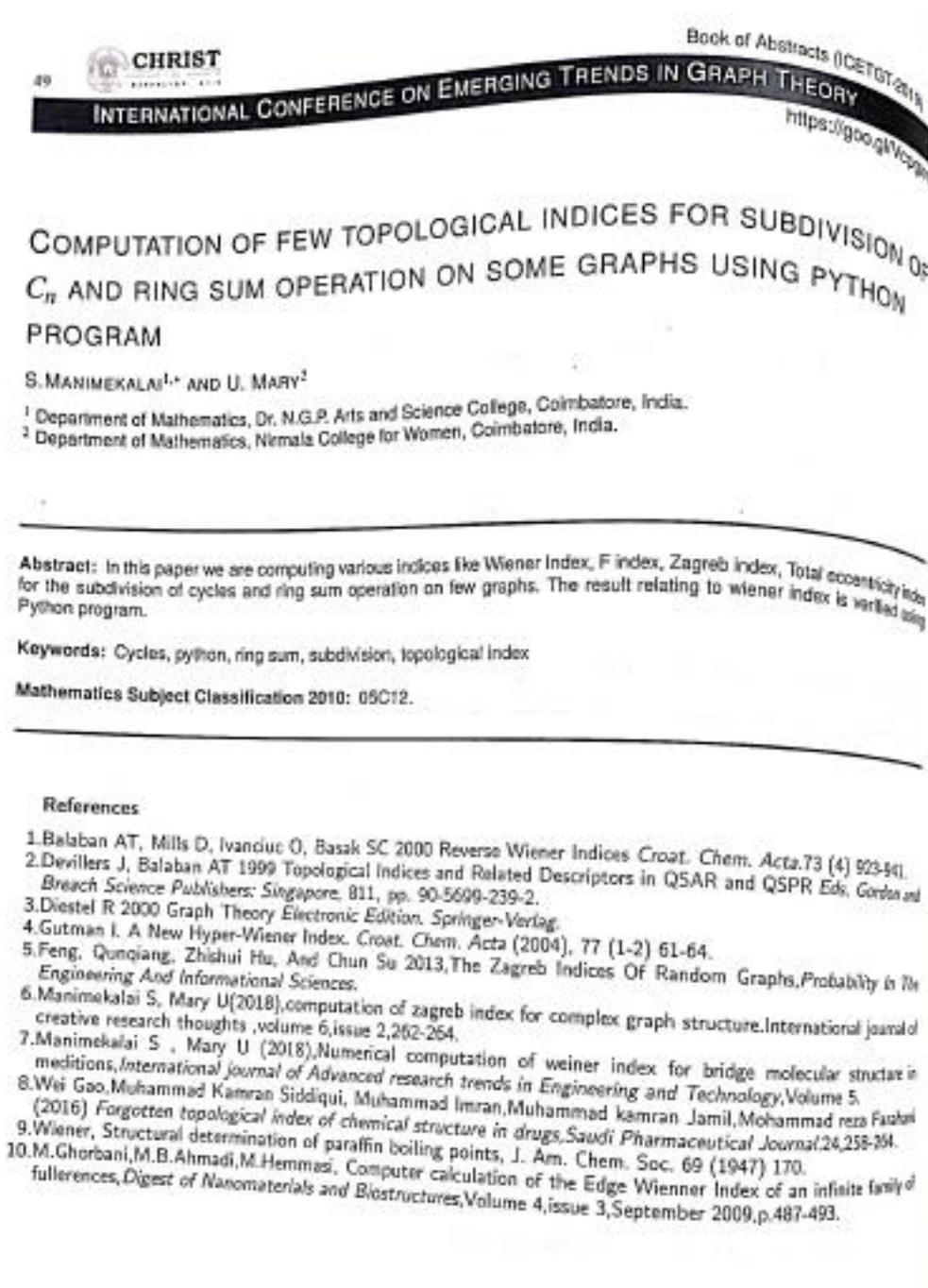
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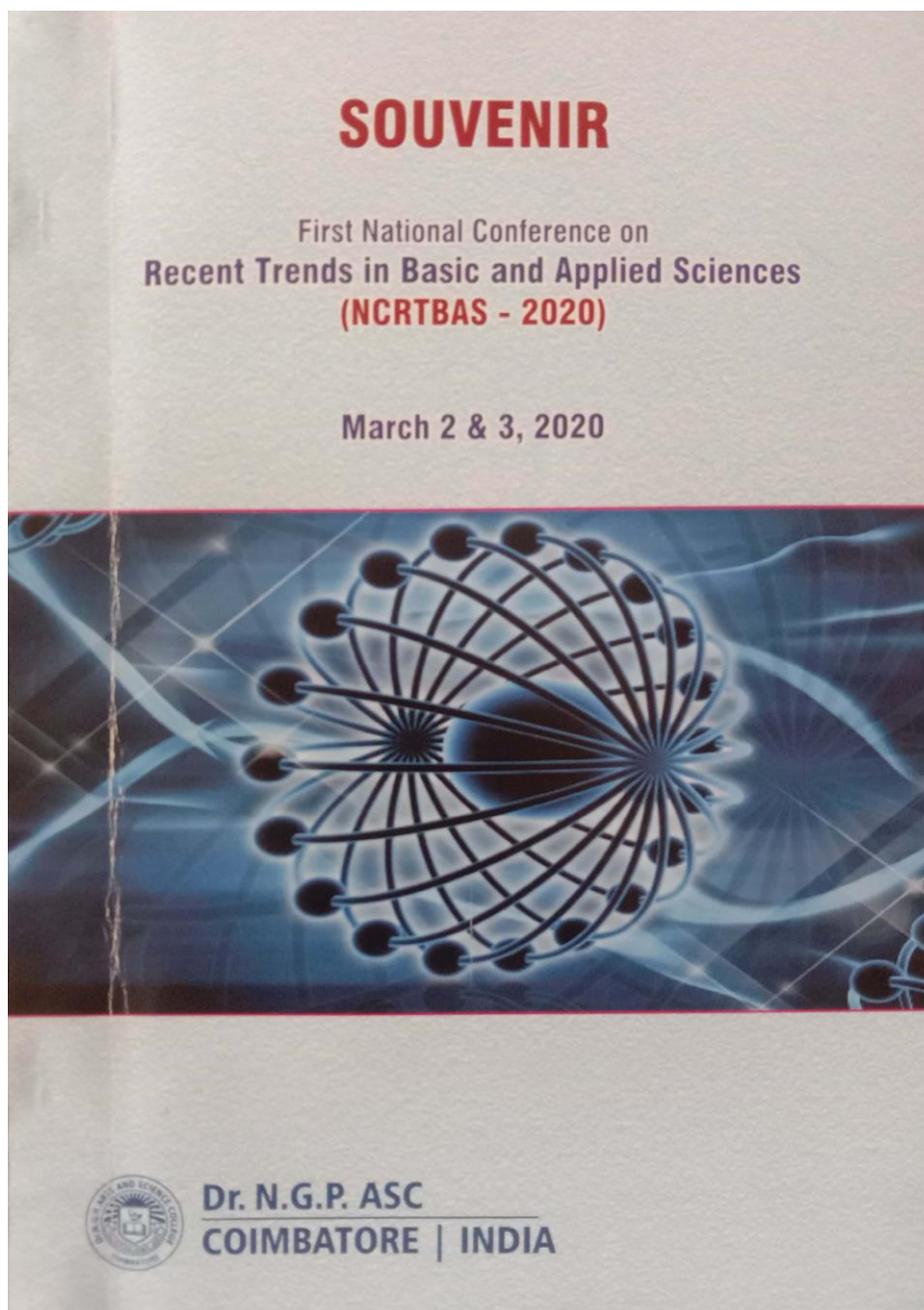
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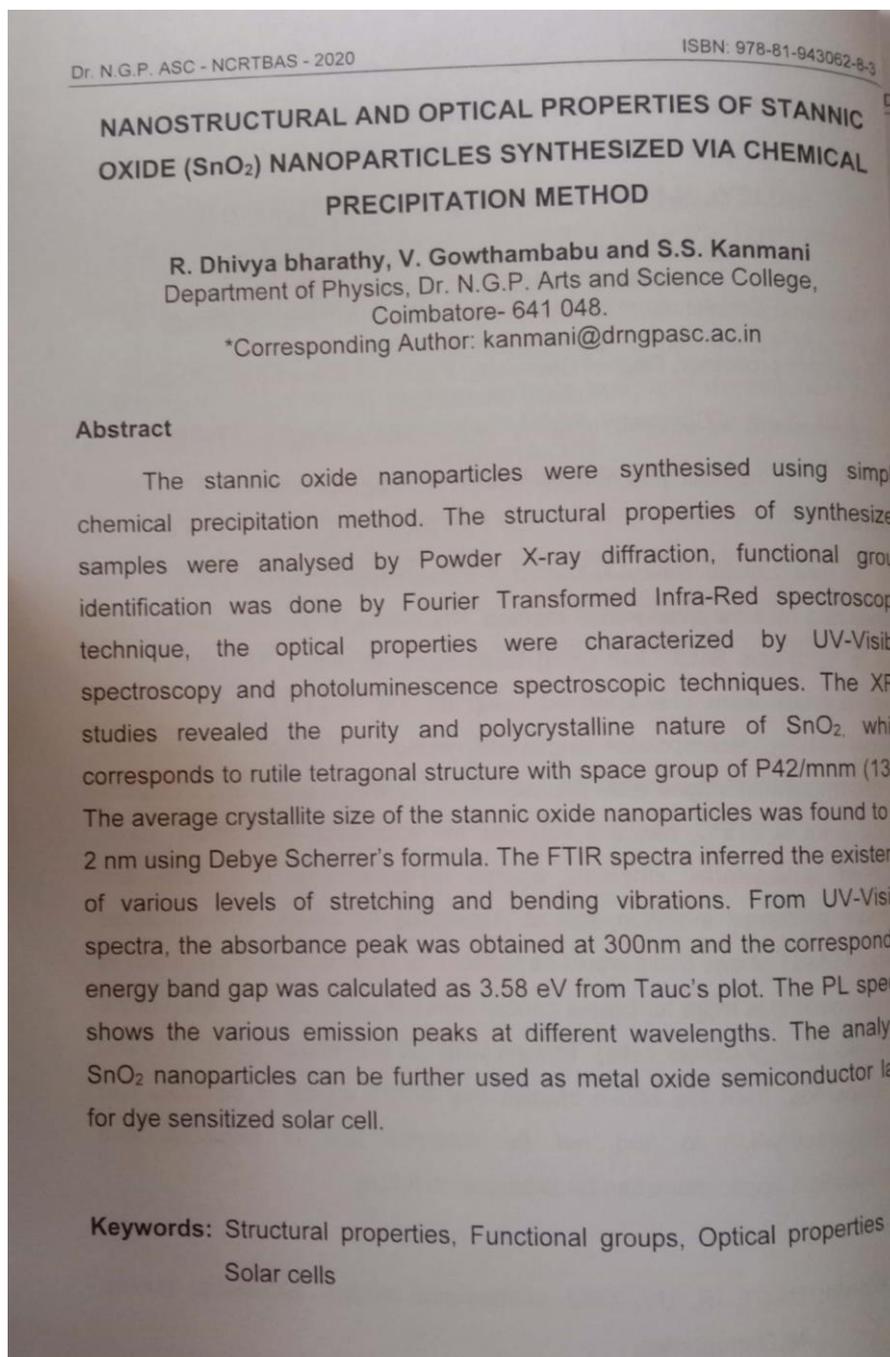


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43. S.S.Kanmani

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STRUCTURAL AND OPTICAL PROPERTIES OF CHEMICALLY SYNTHESIZED TIN OXIDE (SnO₂) NANOPARTICLES

V. Gowthambabu, R. Dhivya bharathy and S.S. Kanmani
Department of Physics, Dr. N.G.P. Arts and Science College,
Coimbatore- 641 048.
*Corresponding Author: kanmani@drngpasc.ac.in

Abstract

The chemical methods are very easy and cost effective to synthesis nanoparticles. In, this, the nanocrystalline Tin Oxide (SnO₂) nanoparticles synthesized using simple chemical precipitation method. The structural analysis taken by Powder X-Ray Diffraction analysis and its revealed that crystalline nature of synthesized tin oxide nanoparticles and average crystalline size was found about 10nm using Debye - Scherrer formula. The functional group done by FTIR spectroscopic analysis. The Uv-Vis spectroscopy is a tool to analyse optical properties of nanomaterials and which reveals that, the absorbance of the tin oxide nanoparticle varies from 200-900nm. The optical energy bandgap of the tin oxide nanoparticles found to be 3.6 eV from Tauc's plot which was plotted between $h\nu$ and $(\alpha h\nu)^2$. The room temperature photoluminescence spectra show blue and green emission peaks at different levels. The synthesized SnO₂ nanoparticles further can be used as semiconductor metal oxide layer for DSSC application.

Keywords: Dye Sensitized Solar Cell, Functional groups and Optical properties

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44. K.Girija

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SIZE TUNABLE PHYSICAL PROPERTIES OF ZNO QUANTUM DOTS

S. Jamuna, P. Divyabharathi, M. Haritha and K. Girija*
Dr. N.G.P. Arts and Science College, Coimbatore, India
*Corresponding Author: kgirija.ngp@gmail.com

Abstract

The surface effects of quantum dots are caused by their tiny size. The semiconductor quantum dots generally range between 2-10 nm in diameter. Zinc oxide (II-VI) is the n-type semiconducting material with wide band gap 3.37 eV and high excitation energy ~ 60 MeV. Zinc oxide were green synthesized using Coriandrum sativum extract. Zinc Acetate was taken as a precursor. The ZnO were characterized using X-ray Diffraction (XRD), Fourier Transform Infrared Radiation (FT-IR) and Transmission Electron Microscope (TEM). The XRD results revealed that the ZnO nanoparticles with pH 12 were of size ~ 8 nm and the same was confirmed using Transmission Electron Microscope (TEM). Hence, we confirm that the prepared ZnO nanomaterial is a Quantum Dot. The FTIR spectra showed O-H stretching at ~ 3628 and 3732 cm^{-1} representing stretching vibration on the particle surface. High electron mobility of Zinc oxide would be a favourable and potential nanomaterial for antibacterial applications.

Keywords: ZnO, Quantum Dots, Green Synthesis, TEM, Antibacterial

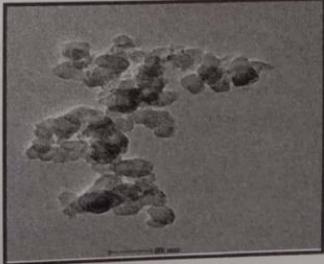


Figure: Transmission Electron Microscope image of zinc oxide quantum dot

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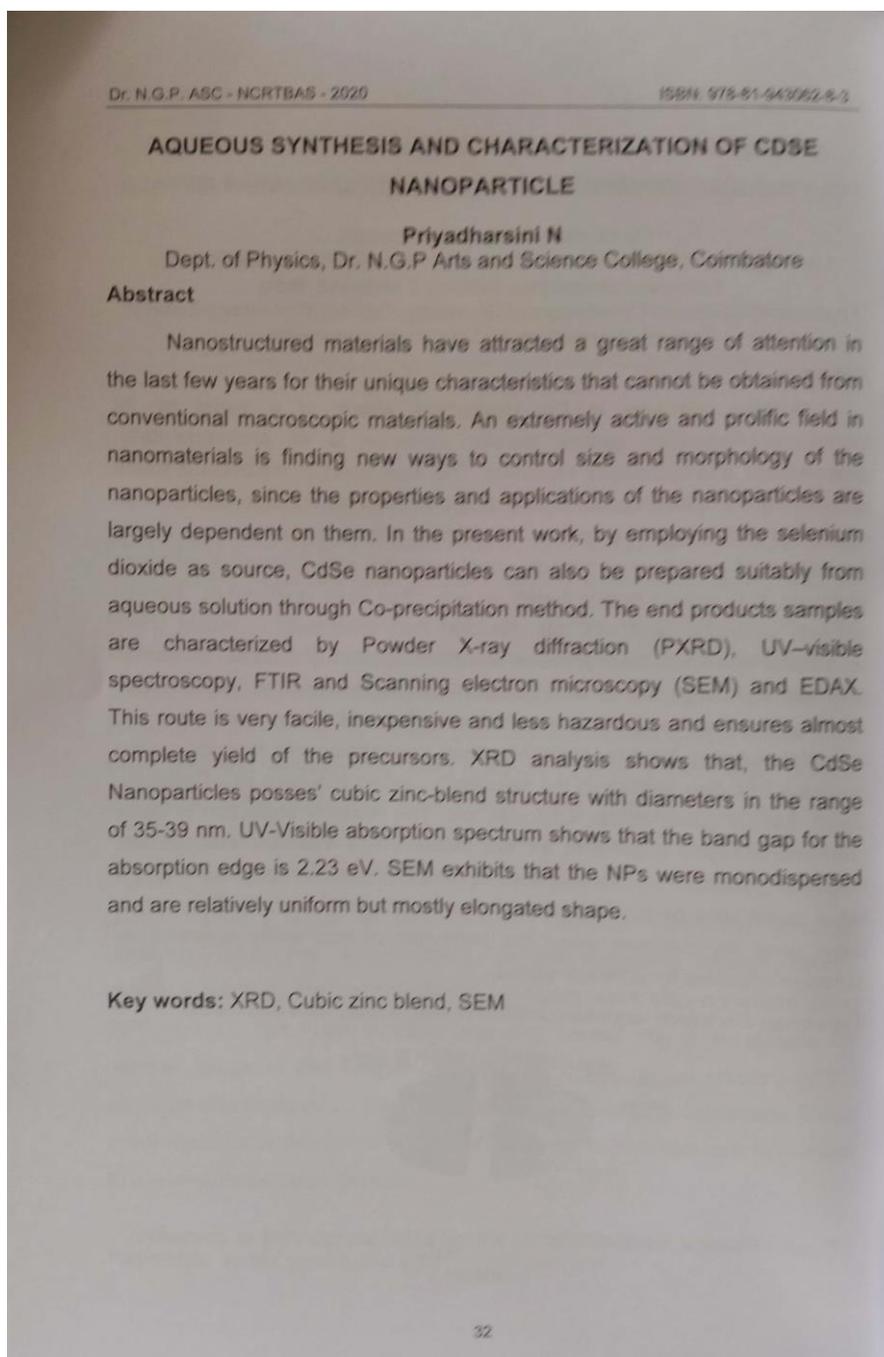
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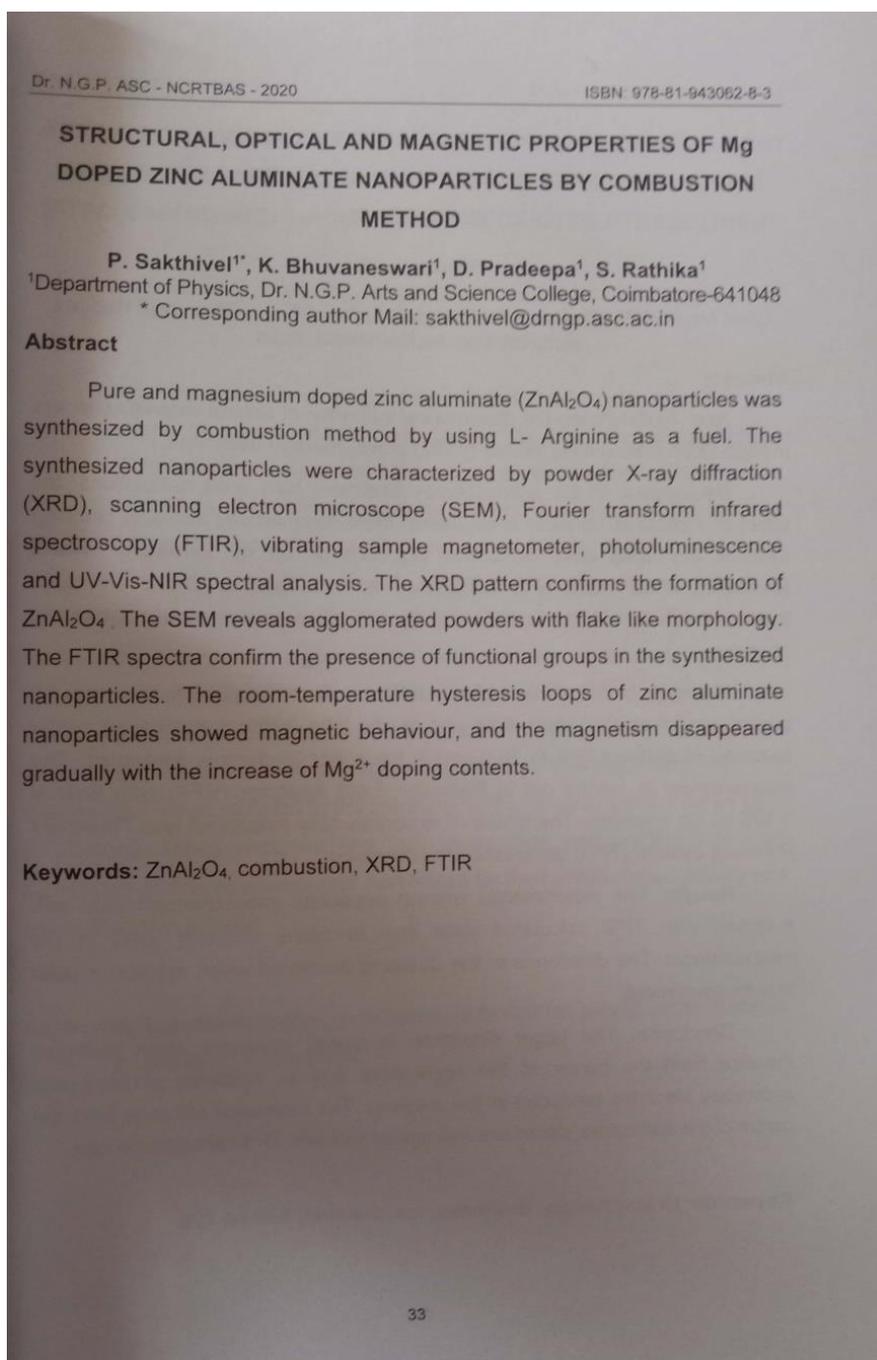
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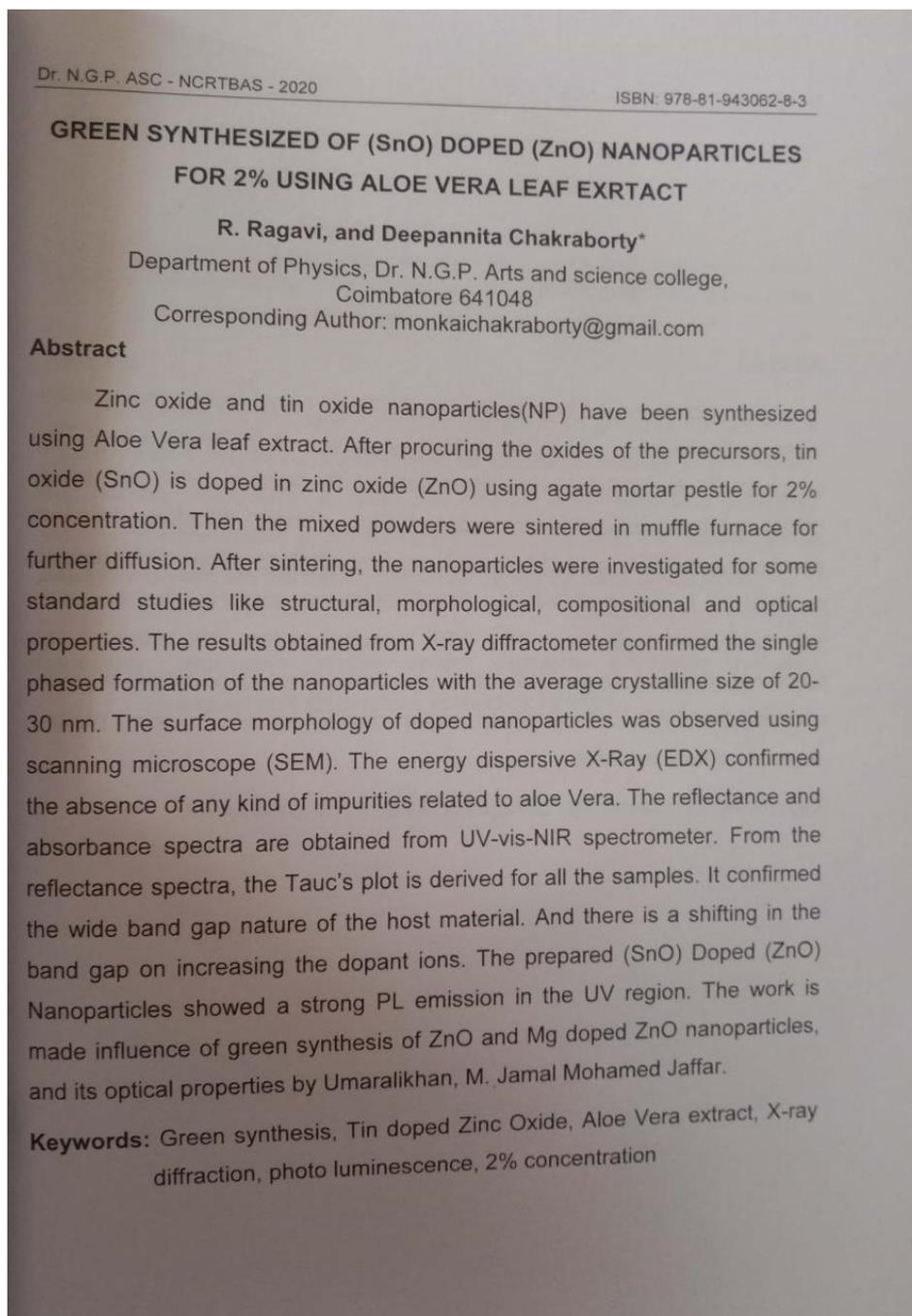
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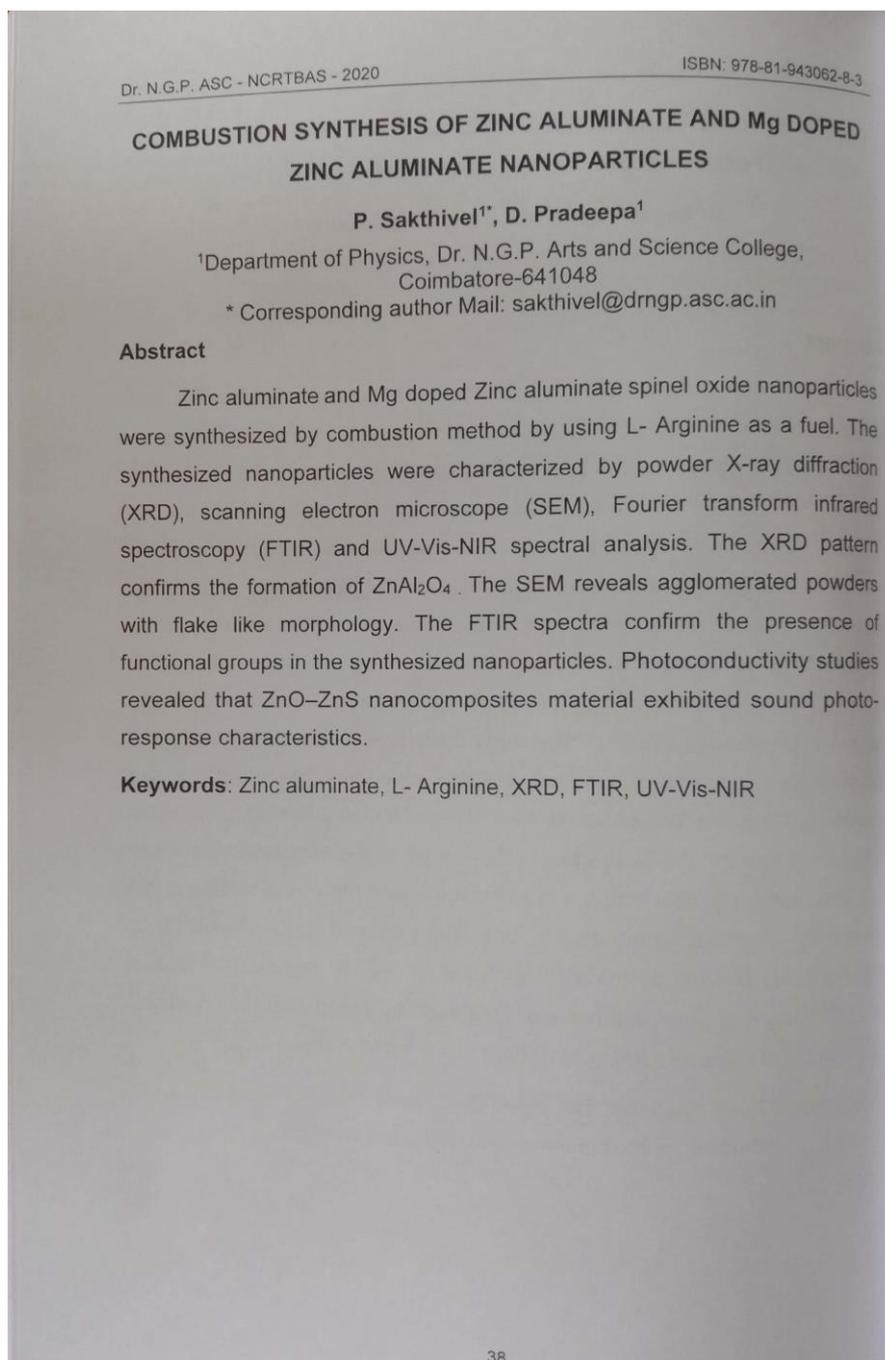
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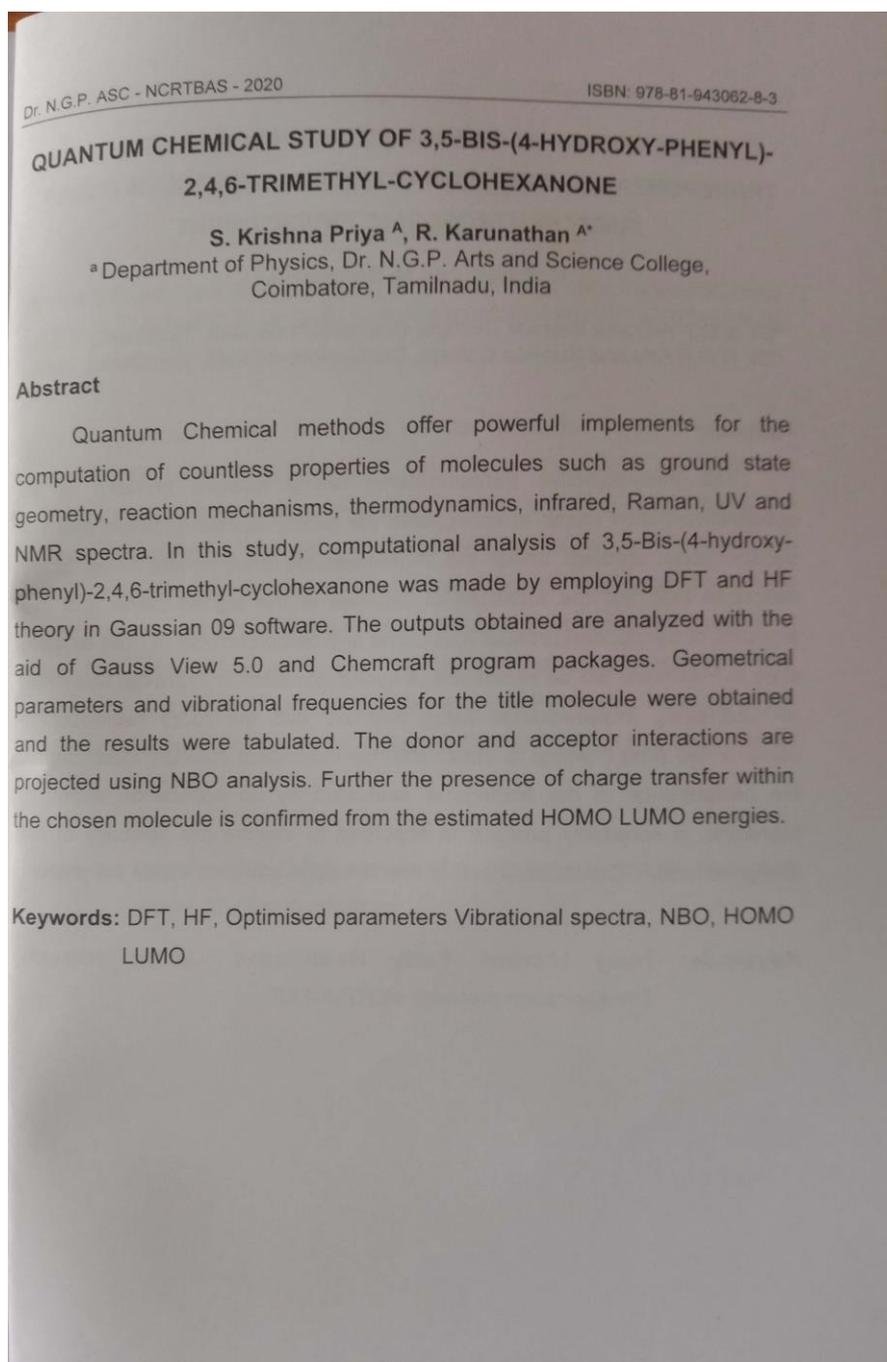
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SYNTHESIS AND CHARACTERIZATION OF COPPER OXIDE QUANTUM DOTS FOR ANTIBACTERIAL APPLICATION

M. Haritha, S. Jamuna, P. Divyabharathi and K. Girija*

Dr. N.G.P. Arts and Science College, Coimbatore-641048, Tamilnadu, India
*Corresponding Author: kgirija.ngp@gmail.com

Abstract

Cupric Oxide (CuO) is an important p-type semiconductor with bandgap 1.2 eV. CuO was synthesized through wet chemical method using Copper Acetate $\text{Cu}(\text{OAc})_2$ as precursor and Triethanolamine acetate (TEA) as capping agent. The crystal structure and morphology of the product were characterized using X-ray Diffraction (XRD), Fourier Transform Infrared Radiation (FT-IR), Transmission Electron Microscope (TEM) and Antibacterial activity of the prepared samples were studied. X-ray Diffraction result revealed that CuO with pH10 were of nano size $\sim 9\text{nm}$ and it was also confirmed by Transmission Electron Microscope. Hence, we confirmed that prepared CuO nanoparticles are Quantum dots. The FT-IR spectra revealed the O-H stretching at $\sim 2936\text{ cm}^{-1}$ which indicates the stretching vibration of the particles in surface. CuO is a potential and interesting material for antibacterial applications.

Keywords: CuO; Quantum Dots; Bandgap; TEM; Antibacterial.

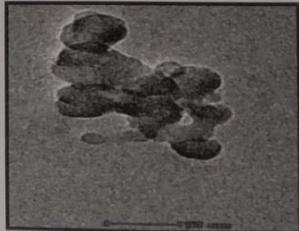


Figure: Transmission electron microscope image of CuO

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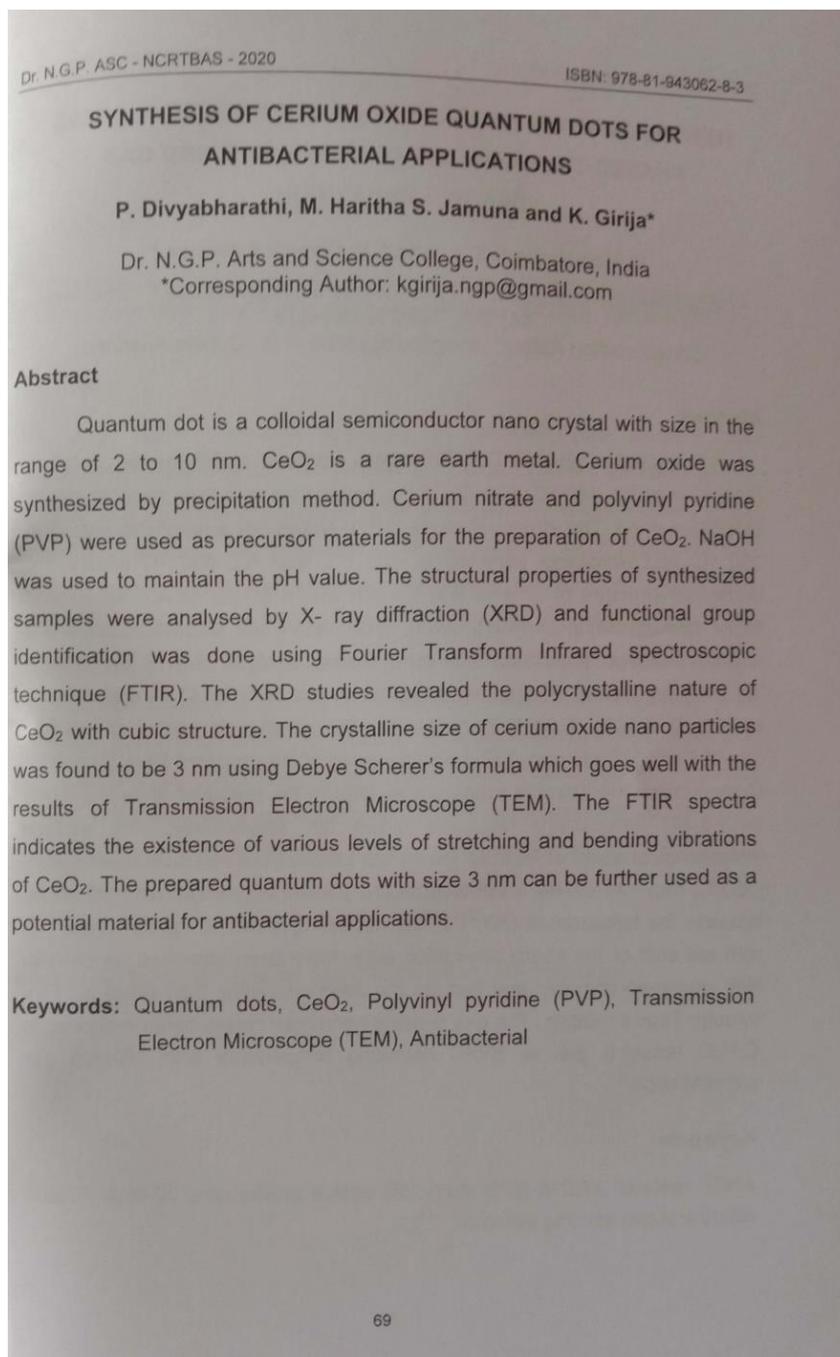
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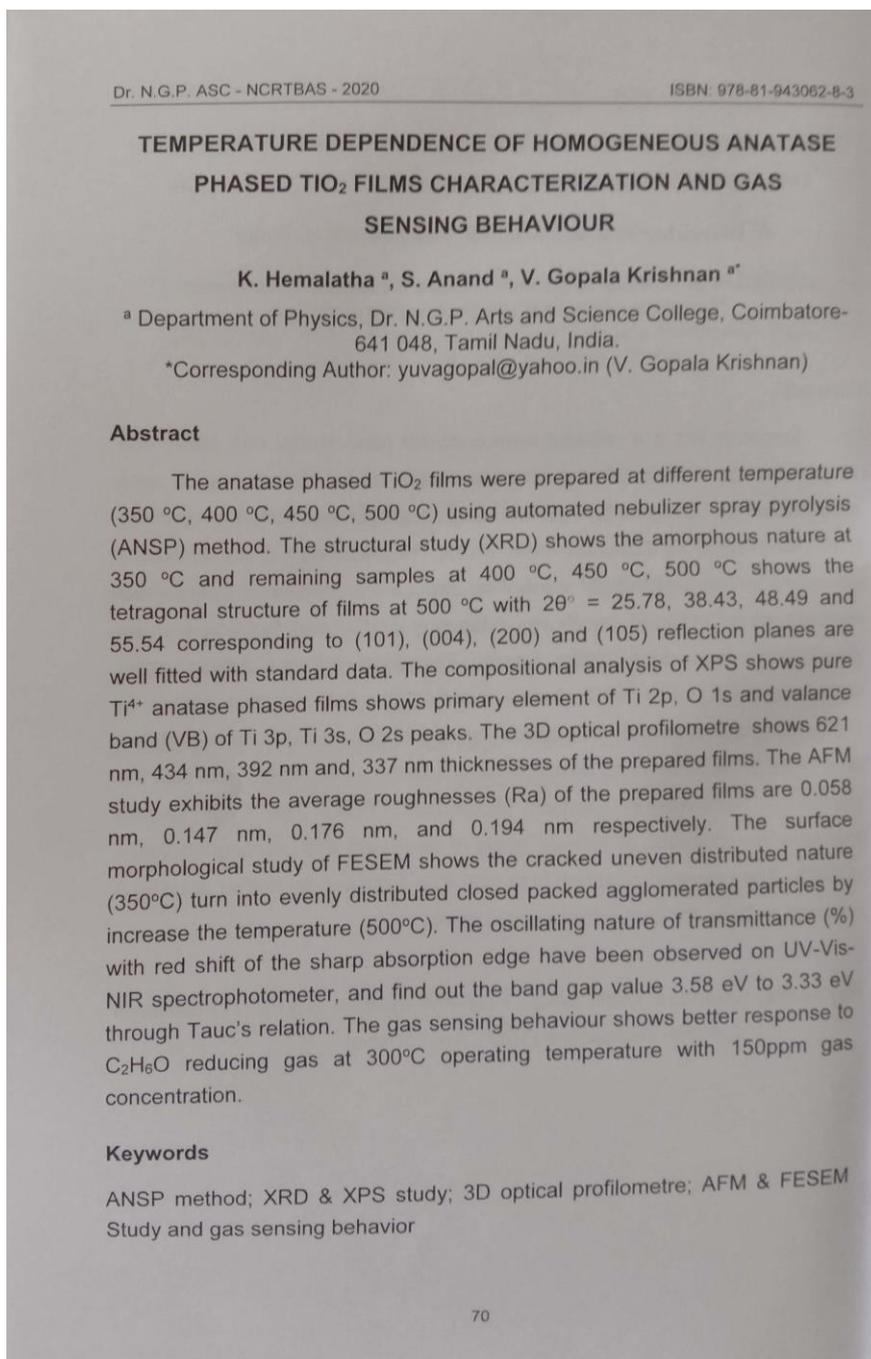
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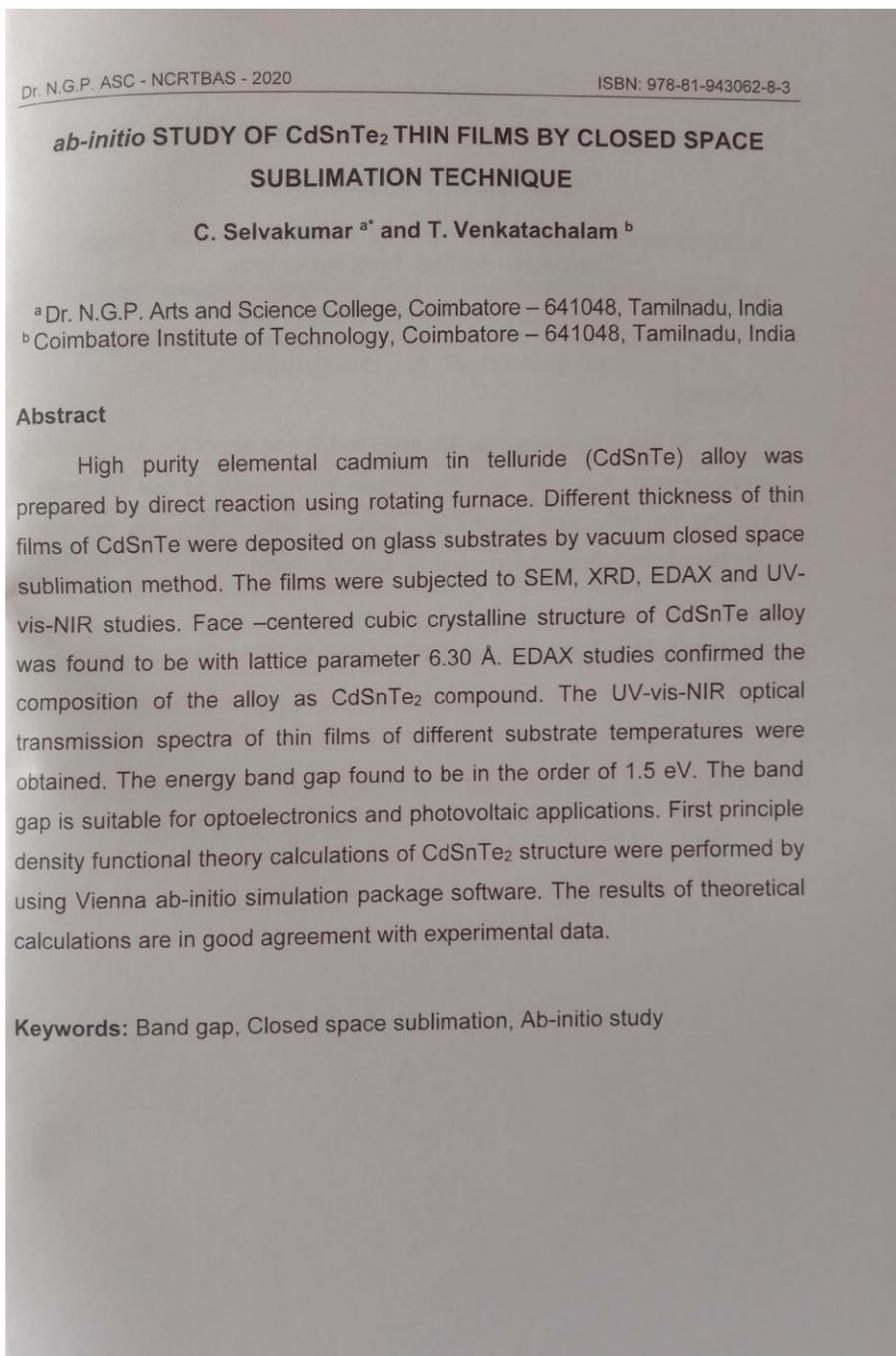
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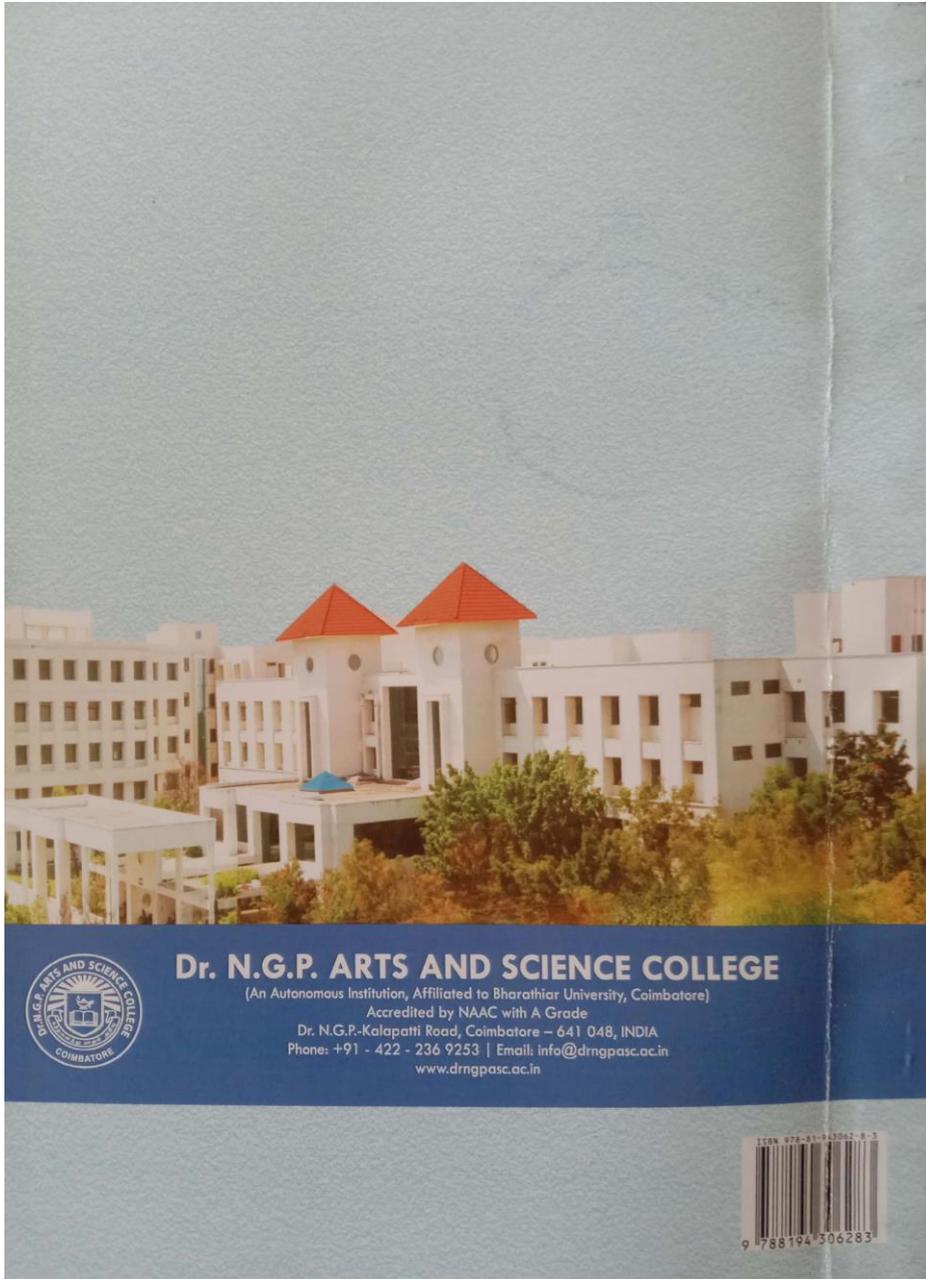


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ABSTRACTS

Therapeutic development

103P - Combinatorial Unique Photothermal Tumour Immunotherapy Against Targeted Triple Negative Breast Cancer Therapy of Dual Modal Nanoplatfom

V. Raju¹, V. Yasothamani¹, S. Shyamsivappan², Y. Haldorai³, K. Saravanakumar⁴

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Abstract

Background

Combinatorial therapy including the immunotherapy is revolutionizing the effective treatment of cancer. It achieved unprecedented responses in advanced-stage patients, including complete cures and long-term survival. However, immunotherapy also has limitations, such as its relatively low response rates and the development of severe side effects. These drawbacks are gradually being overcome by improving our understanding of the immune system, as well as by establishing combination regimens in which immunotherapy is combined with other treatment modalities.





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103P Combinatorial unique photothermal tumour immunotherapy against targeted triple negative breast cancer therapy of dual modal nanoplatform

V. Raju¹, V. Yasothamani¹, S. Shyamsivappan², Y. Haldorai³, K. Saravanakumar⁴

¹Department of Zoology, Bharathiar University, Coimbatore, India, ²Department of Chemistry, Bharathiar University, Coimbatore, India, ³Department of Nanoscience and Technology, Bharathiar University, Coimbatore, India, ⁴Medical Biotechnology, Kangwon National University, Chuncheon, Republic of Korea

Background: Combinatorial therapy including the immunotherapy is revolutionizing the effective treatment of cancer. It achieved unprecedented responses in advanced-stage patients, including complete cures and long-term survival. However, immunotherapy also has limitations, such as its relatively low response rates and the development of severe side effects. These drawbacks are gradually being overcome by improving our understanding of the immune system, as well as by establishing combination regimens in which immunotherapy is combined with other treatment modalities.

Methods: Herein, we report the method of coassembly of two structurally defined materials, each comprised of photothermal agent and a small molecule immunostimulant molecularly self-assembled. One organic polymer has excellent photothermal properties; the other one has designed for efficient immune activation, contributing to superior stability during circulation.

Results: The coassembled nanoparticles (NPs) possess superior photothermal conversion efficiency as well as efficient encapsulation and controlled release of cytotoxic molecules and immunomodulatory agents. NPs loaded with immunostimulant has proven to be a highly efficacious combination photothermal/immunotherapeutic nanoplatform against Triple Negative Breast Cancer xenograft model. When loaded with imiquimod, a potent small molecule immunostimulant, NPs is found to be highly effective against breast cancer model, particularly when photothermal/immunotherapy is given. Such dual therapy not only eradicates the light-irradiated primary tumours, but also activates systemic antitumor immunity, causing tumour death at light-unexposed distant tumour sites.

Conclusion: In conclusion, this “photothermal immunotherapy” approach, photothermal ablation of tumour cell death reduces tumour growth and releases tumour antigens into the surrounding milieu, while the immunoadjuvants potentiate host anti-tumor immunity. Our results indicated that combined photothermal immunotherapy





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Proceedings of the International Conference on New Trends in
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Abstract

Keywords and phrases: Delay-dependent stability; Dissipativity; Markovian Jump; Static neural network; activation functions; Linear matrix inequality; Lyapunov-Krasovskii functional; leakage delay; mode dependent random time delays.

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EVOLUTIONARY MULTIVARIATE KERNEL SVM PREDICTION METHOD FOR CLASSIFICATION

K.GEETHA, S. REKHA, B.SIVARANJANI

Assistant Professors¹, Department of Information Technology,
Dr.N.G.P Arts and Science College, Coimbatore.

Abstract

Thyroid disorders are common among the world wide population. This disorders possess significant problems among Indians. Research studies shows that nearly 32% of Indian population suffers from various thyroid disorders. There are various kinds of thyroid disorders including thyroid nodules, hyperthyroidism, goiter, and thyroiditis and thyroid cancer. This paper focuses on the classification of two of the most common thyroid disorders are hyperthyroidism and hypothyroidism among the public. The National Institutes of Health (NIH) states that about 1.2% of Americans suffer from Hyperthyroidism and about 4.6% suffer from Hypothyroidism. Above statistics implies the classification of thyroid disorder is crucial in global perspective too. The data for this research work is collected from the UCI repository which undergoes preprocessing. The preprocessed data is multivariate in nature. Curse of Dimensionality is followed so that the available 21 attributes is optimized to 10 attributes using Hybrid Differential Evolution Kernel Based SVM algorithm. In order to stabilize the errors this iterative process takes 30 runs and the data is classified. The accuracy of classification is observed to be 67.97%. This result is average when compared to our previous work that used the Kernel based Naïve bayes classifier.

Keywords and phrases: Classification, Curse of Dimensionality, Differential Evolutionary algorithm, Multivariate Bayesian prediction, Radial Basis Function Kernel, Support Vector Machine, Thyroid disease, Wrapper model.

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CONTROLLABILITY RESULTS FOR IMPULSIVE NEUTRAL MIXED TYPE FUNCTIONAL INTEGRO-DIFFERENTIAL EVOLUTION EQUATIONS WITH NON-LOCAL CONDITIONS

K. R. Salini, T. Gunasekar, and M. Angayarkanni

Department of Mathematics, Thiruvalluvar University College of Arts and Science,
Gajalnaickenpatty, Tamil Nadu, India.

Department of Mathematics, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and
Technology, Chennai - 600062, Tamil Nadu, India.





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BIG DATA TECHNIQUES TO ANALYZE SENTIMENT DATA AMONG SOCIAL NETWORKS

Dr.R.Rajesh Kanna, Associate Professor, Department of Computer Applications, Dr. N.G.P. Arts and Science College (Autonomous), Coimbatore.

ABSTRACT

Present investigative approaches in computational social science can be characterized by four dominant paradigms: text analysis, social network analysis, social complexity analysis, and social simulations. However, when it comes to organizational and societal units of analysis, there exists no approach to conceptualize, model, analyze, explain, and predict social media interactions as individuals' associations with ideas, values, identities, and so on. To address this limitation, based on the sociology of associations and the mathematics of set theory, this paper presents a new approach to big data analytics called social set analysis. Social set analysis consists of a generative framework for the philosophies of computational social science, theory of social data, conceptual and formal models of social data, and an analytical framework for combining big social data sets with organizational and societal data sets. Three empirical studies of big social data are presented to illustrate and demonstrate social set analysis in terms of fuzzy set-theoretical sentiment analysis, crisp set-theoretical interaction analysis, and event studies-oriented set-theoretical visualizations. This paper develops a combined dictionary based on social network keywords and online review and also find hidden relationship pattern from these keyword.

Keywords: Sentiment analysis, Big social data, social analysis, visual analytics, Computational big social data, social network.

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