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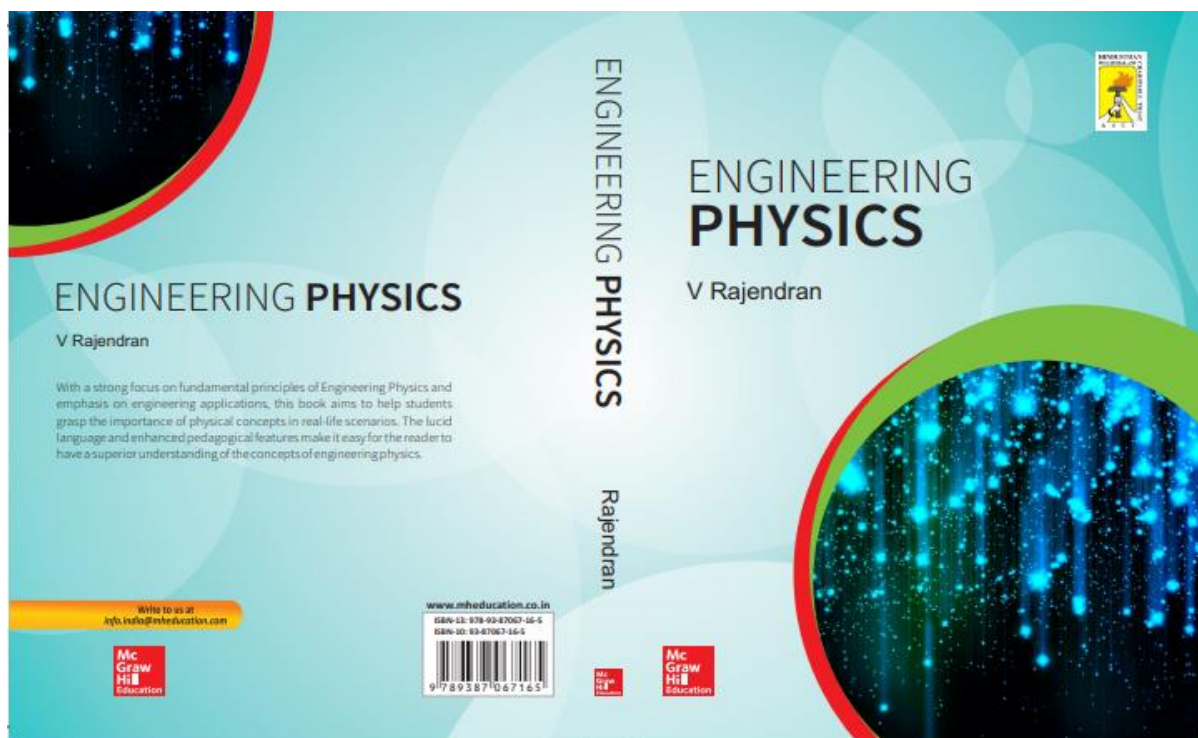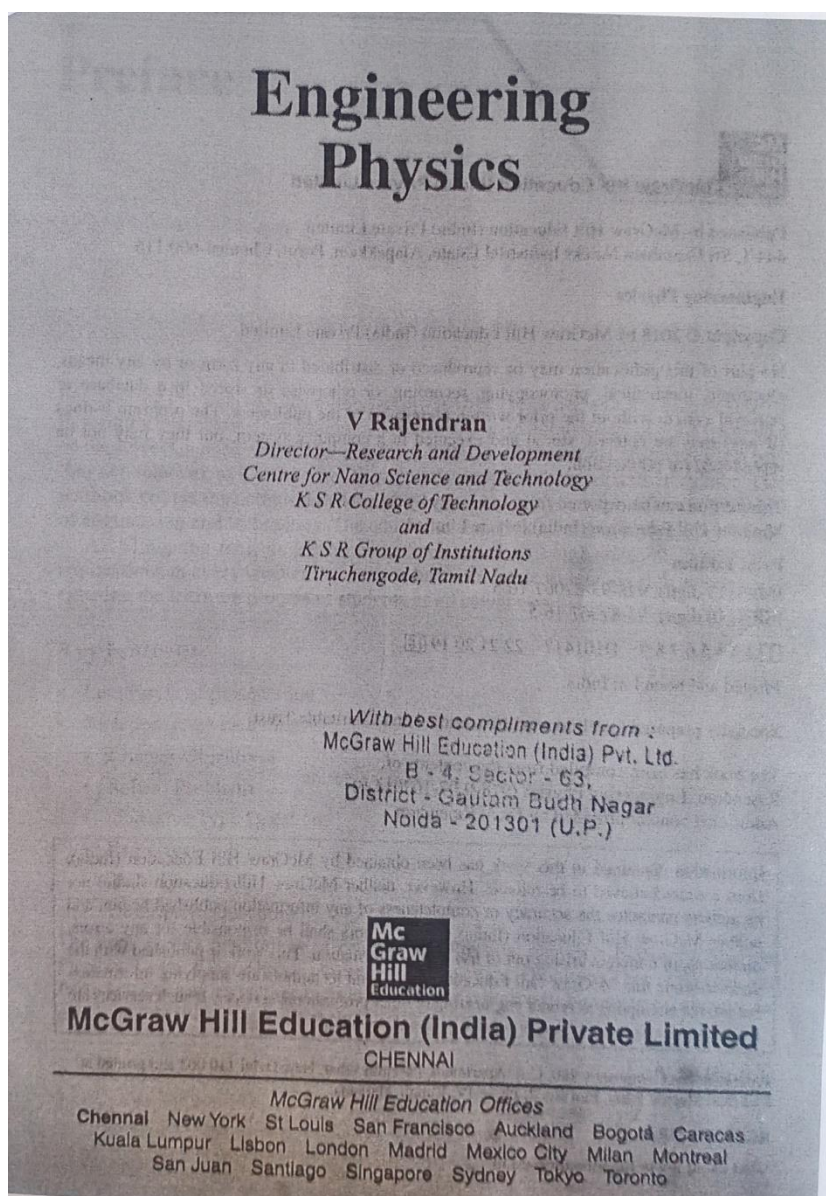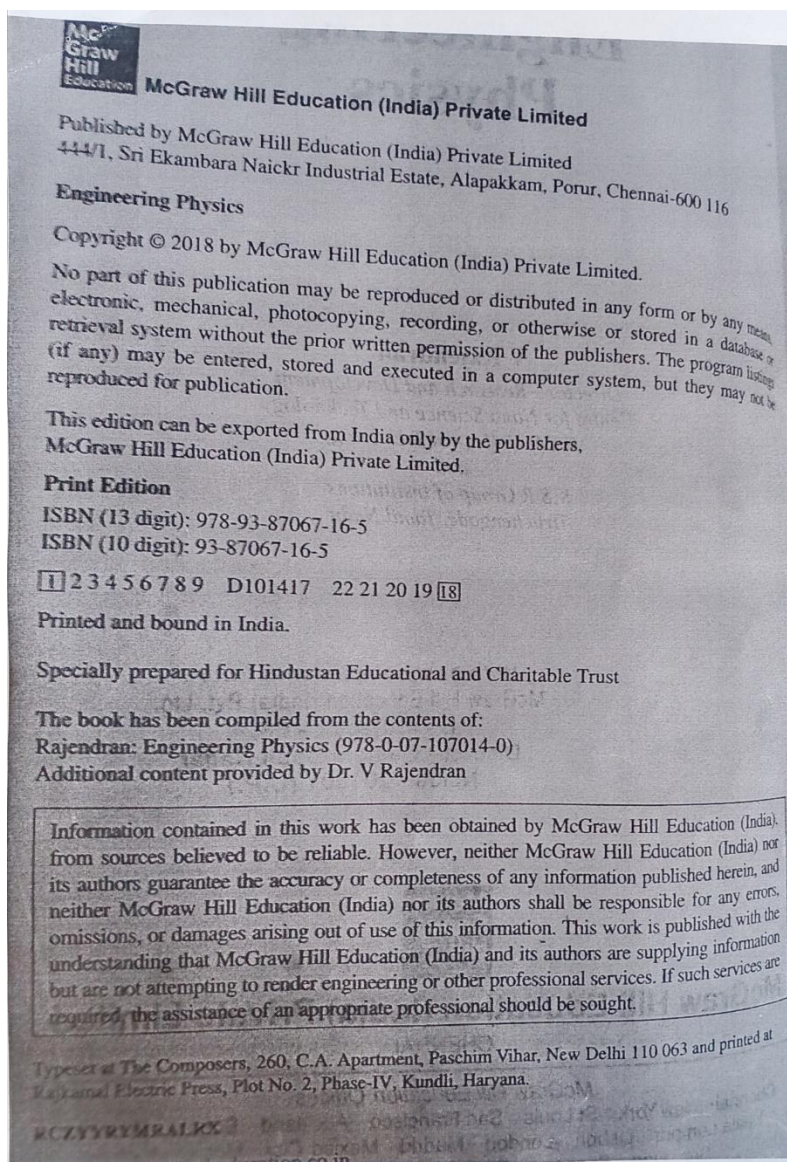
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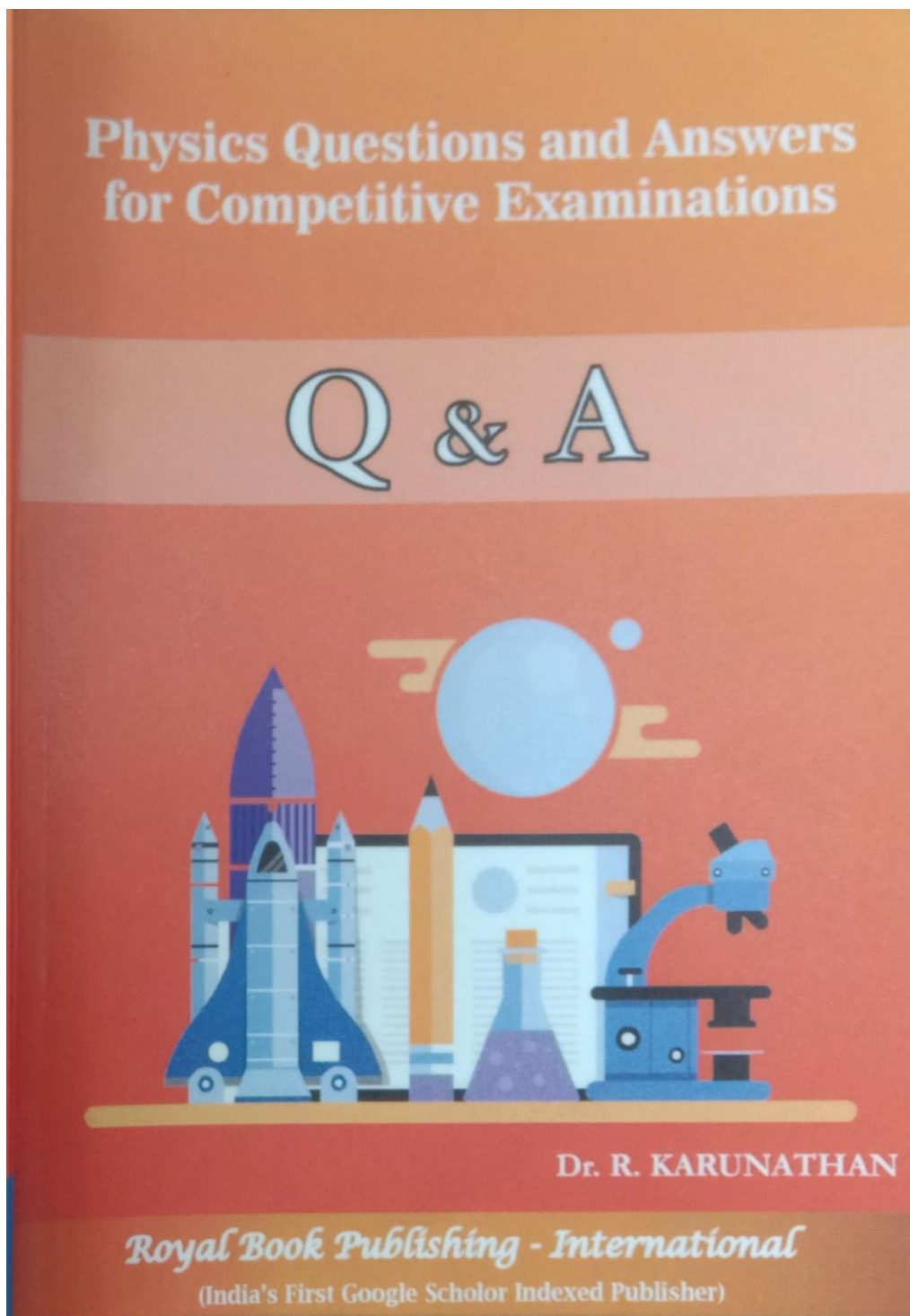
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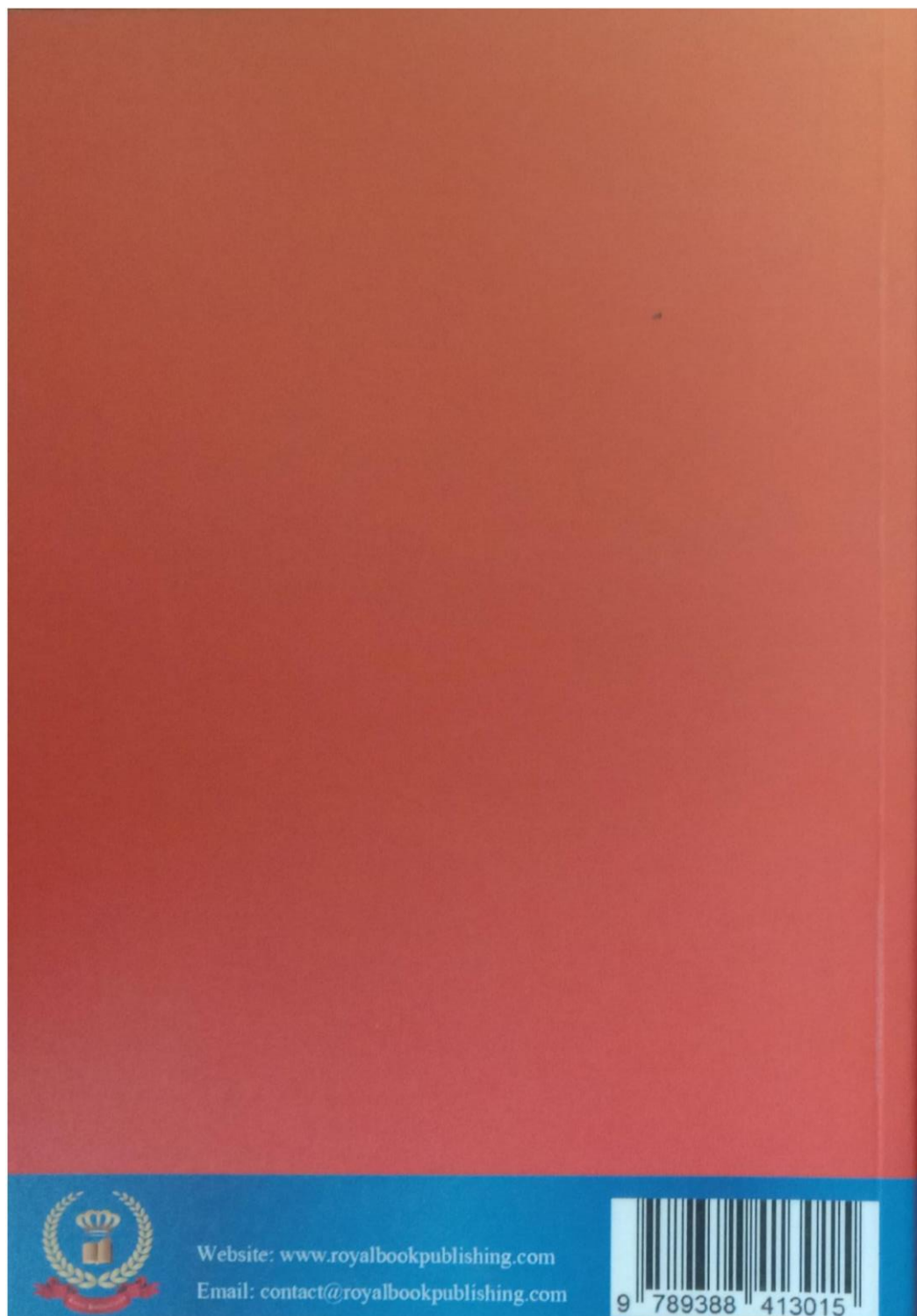
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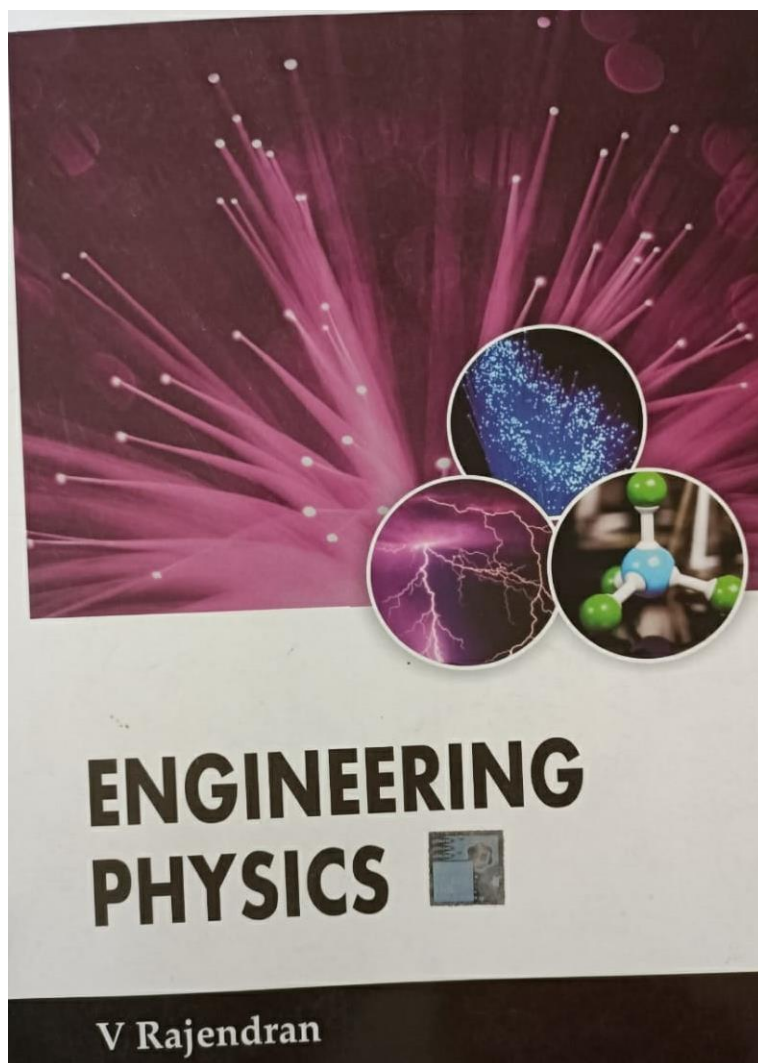
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Dr Rajendran has visited many countries including USA, West Indies, Germany, Italy, France, Sweden, Finland, Singapore, Hong Kong, Australia and Taiwan as visiting professor, guest scientist to various research laboratories, universities and conferences; and has received many laurels and awards such as National NDT Man of the Year 2004, TANSA Award, INDO-AUS Senior Visiting Scientist Fellowship Outstanding Organiser Award, DAAD from Germany, INSA, TNSCST Young Scientist, and DAE / BRNS Visiting Scientist. Under his able guidance, 11 scholars have completed their doctoral degrees and 14 scholars are pursuing their PhD degrees. An enthusiastic academician, he has organised four national-level conferences on Ultrasonics, Acoustics and Instrumentation, three international conference on Nanomaterials and several workshops towards fulfilling his vision of imparting knowledge to budding research scholars. He has also attended several national and international conferences both in India and abroad. He has to his credit more than 145 research papers in reputed international journals, 75 papers in conference proceedings, 16 refereed books, 11 edited proceedings, 2 research and development books and 11 patents.

Dr Rajendran is also involved in several collaborative research projects with many leading research laboratories, both in India and abroad. His passion towards research led him to be the Principal Investigator of 16 completed, sponsored research projects with a fund involvement to the tune of INR 21.1 million. Presently, sponsored research projects to the tune of INR 11.19 million are under progress with sponsorship from UGC-DAE, DST, DRDO, IGCAR, etc. Presently, he is involved in research including nano metal oxides for different industrial applications, nano silica from rice husk for applications in textiles and biomedicine, nano bioactive glasses and developing nanoparticles from herbs for biomedical applications.

He is an international expert panel member of the nanomineral unit of the Mintek Nanotechnology Innovation Centre, South Africa and Adjunct Professor at Edith Cowan University, Australia. His memberships include fellowships and life memberships of many scientific societies both in India and abroad. He is a member in the Board of Studies and Doctoral Committee in several universities (including Anna University). Also, he is in the peer review group for many international and national refereed journals apart from being the President of Acoustical Society of India.

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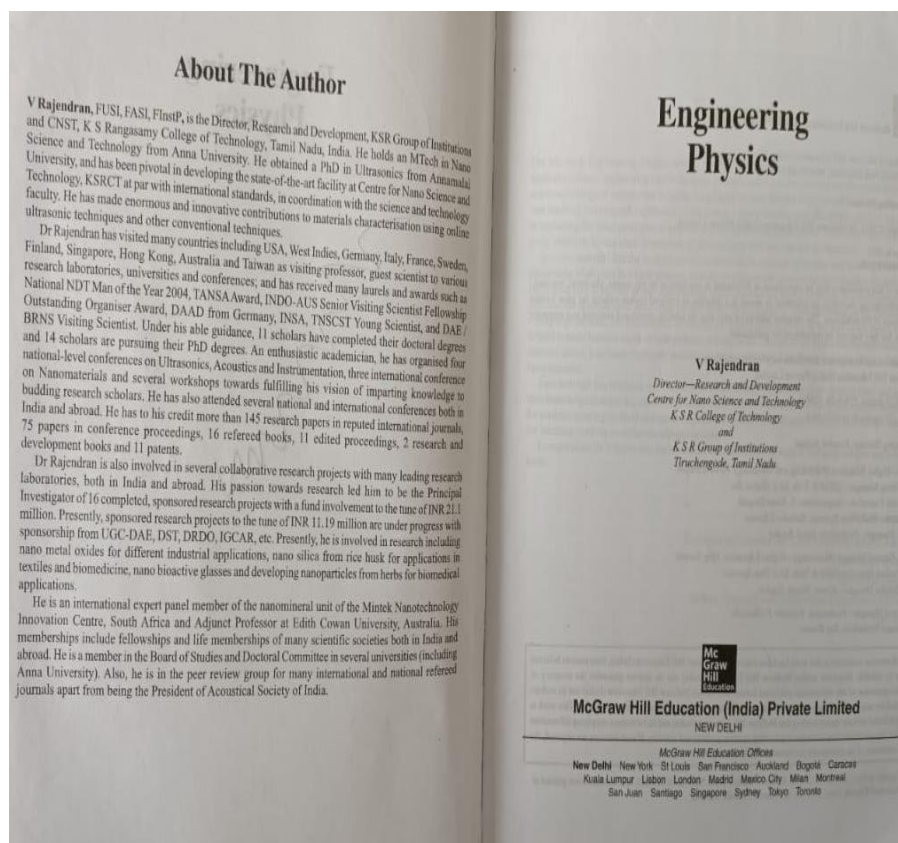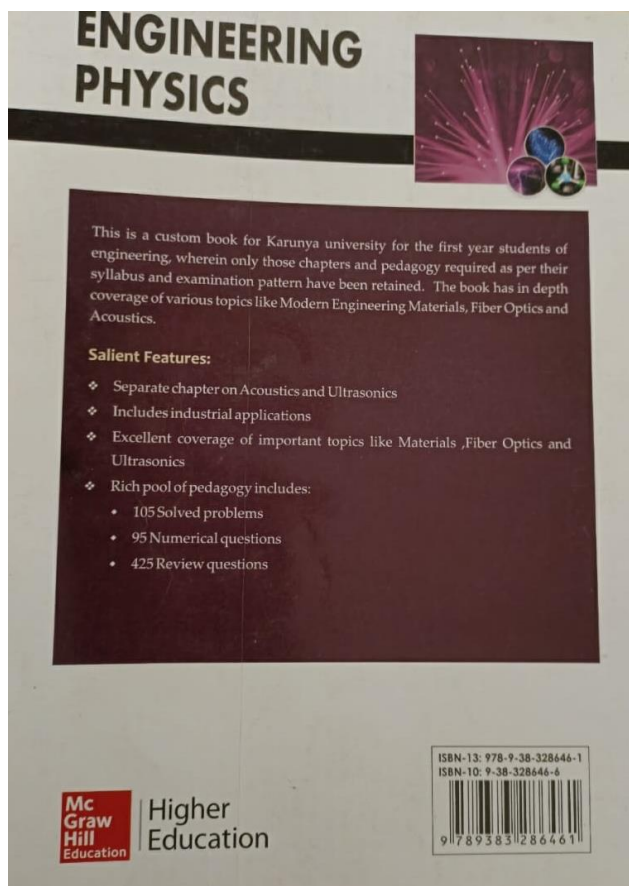*Tiruchengode, Tamil Nadu*

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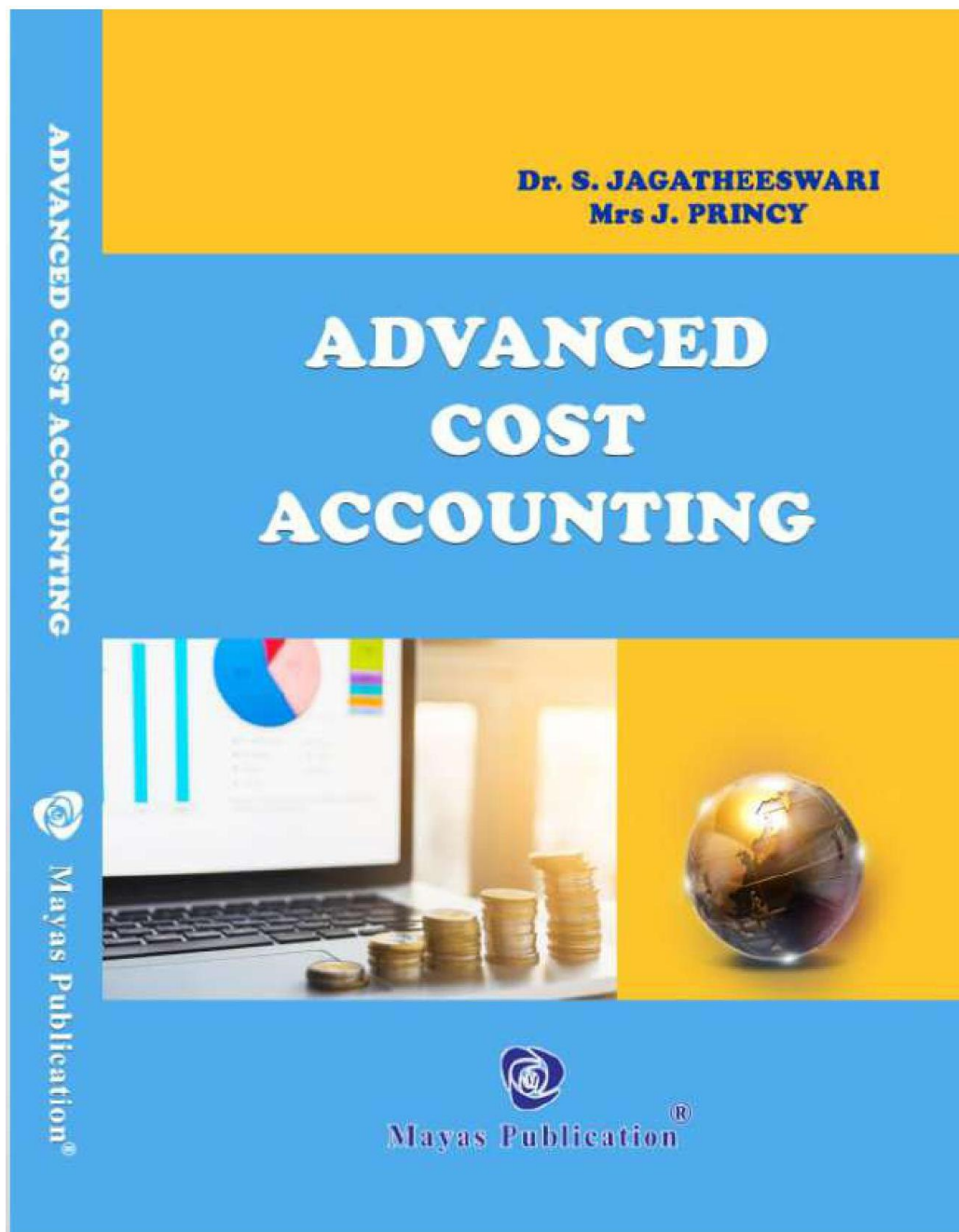Web: www.drngpasc.ac.in |Email: info@drngpasc.ac.in | Phone: +91-422-2369100

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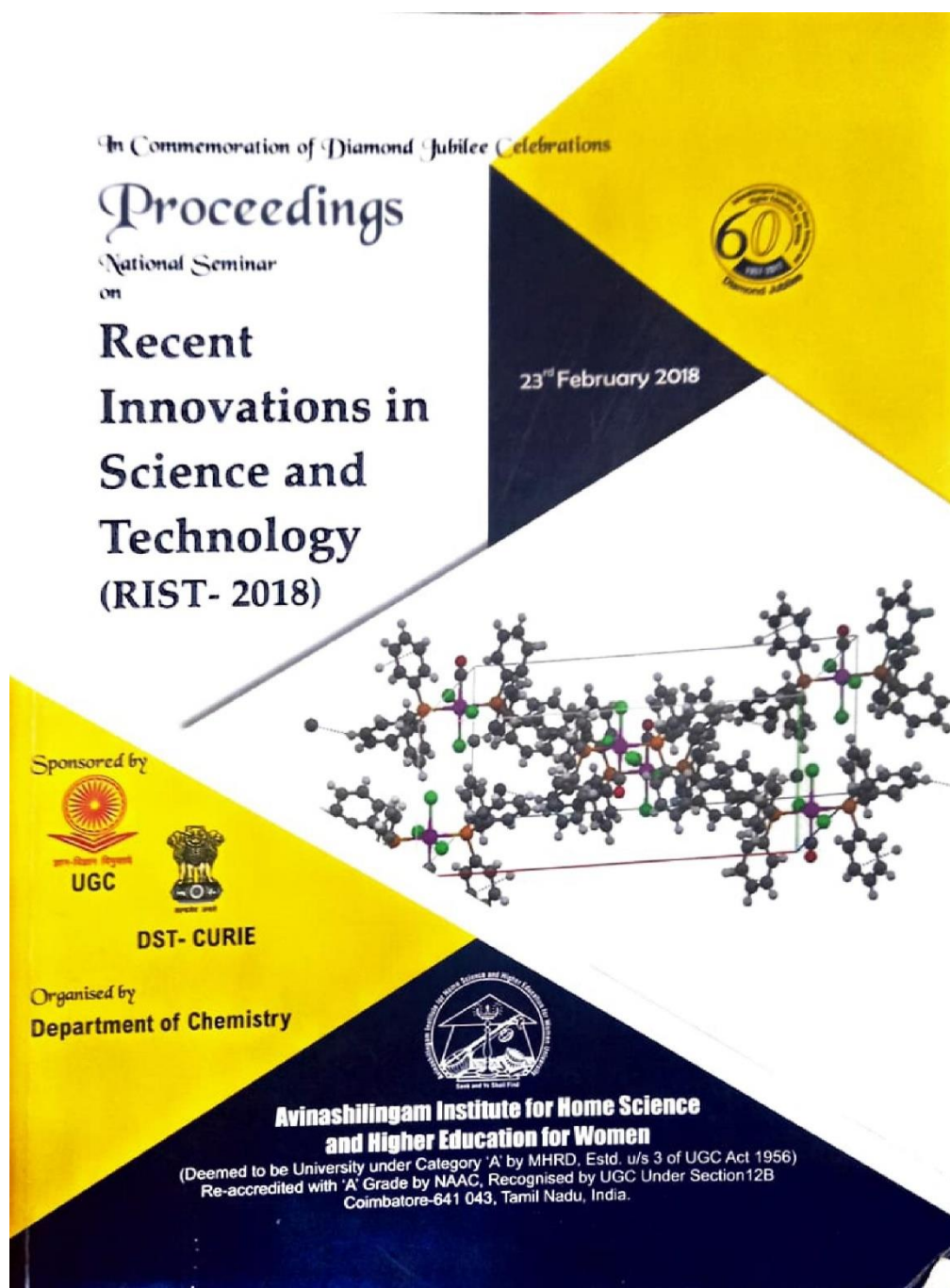
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# EVALUATION OF CHITOSAN DERIVATIVES FOR THE DELIVERY OF SALICYLIC ACID

Sathya Priya[a], S.Sheeba Joy Bell[b], R.Menaka[c], S.Subhashini[d]

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ABSTRACT
Chitosan (CS), a versatile biopolymer was chemically modified with Maleic anhydride to obtain water soluble N-Maleyl Chitosan (NMC). The obtained water soluble derivative was further blended with Polyvinyl Alcohol in 1:1 ratio to get PVA composite of NMC. Derivatives of chitosan were characterized using UV-Visible spectroscopy (UV), Fourier transform resonance spectroscopy (FT-IR) and TGA. The drug releasing behaviour of the chitosan derivatives was tested using salicylic acid as a model drug. Drug was loaded into the composite by solvent evaporation technique. Drug entrapment efficiency of CS, NMC and NMC-PVA are found to be 88%, 86% and 96% respectively. Effect of pH (3-7) on drug release with time was studied for 24 hours. The kinetics study reveals that the fickian diffusion model was followed for the drug release.
KEY WORDS: Chitosan, Maleic Anhydride, Polyvinyl Alcohol, FTIR, Salicylic acid.

## INTRODUCTION

Polymers are playing important role in pharmaceuticals. They are used as binders in tablet, increases solubility of poorly soluble drugs, used as film coatings on drugs to disguise their taste and enhances their stability etc. (Mohammadet al, 2012). Biodegradable polymers that are mostly used in drug delivery systems because of its non-toxic and biocompatible nature (Janaet al, 2011). Among the natural polymers Chitosan (CS) has received major attention mainly due to their biodegradable, biocompatible, non-toxic, mucoadhesiveness, antimicrobial, antioxidant, low immunogenicity etc. which enhance its potential in different biomedical applications (Jing et al, 2014). Chitosan is a cationic linear copolymer polysaccharide made up of random distribution of β (1→4) linked 2- amino- 2- deoxy- D-glucose (D-glucosamine) and 2- acetamido- 2- deoxy- D- glucose (N- acetyl- D- glucosamine) units.

Maleic acid (MA) is commonly used in the pharmaceutical industries as a drug intermediate to form the maleate salts of several categories of therapeutic agents (Abuet al, 2015). Use of even small quantities of diprotic acid proved to impart remarkable properties to the hydrogels of starting monomers and/or homo polymers (Tasdelenet al, 2004).Poly (vinyl Alcohol), PVA is a non-toxic, water-soluble synthetic polymer and has good physical and chemical properties and film-forming ability. The use of this polymer is important in many applications such as controlled drug delivery systems (Sumanet al, 2012).

The aim of the present study is to modify Chitosan with Maleic acid to obtain water soluble N-maleyl Chitosan (NMC), and blending with Polyvinyl Alcohol, and to analyse the drug loading capacity and release behaviour of those polymers using Salicylic Acid as a model drug at various pH

## MATERIALS AND METHODS

### Materials

Chitosan with 75% of degree of deacetylation. Poly vinyl alcohol (molecular weight 1, 40,000) and Maleic anhydride were supplied by HiMedia. Salicylic acid (Merck), Glacial acetic acid, Acetone, Ethanol, Disodium Hydrogen Phosphate, Dimethyl Sulphoxide (DMSO) and Dimethyl Formamide (DMF) were used for the synthesis was supplied by LobaChemie.

### Preparation of CS-MA-PVA

Preparation of N-Maleyl Chitosan: Chitosan (1g) was dissolved in 100ml of 1% acetic acid. The solution was allowed to stand for half an hour with constant stirring. Maleic anhydride (2.4g) was dissolved in 5ml of ethanol and added drop wise to the Chitosan solution with constant stirring (Scheme1). The mixture was allowed to stand for 15 hours at room temperature. The product was precipitated and washed with acetone. The product was air dried
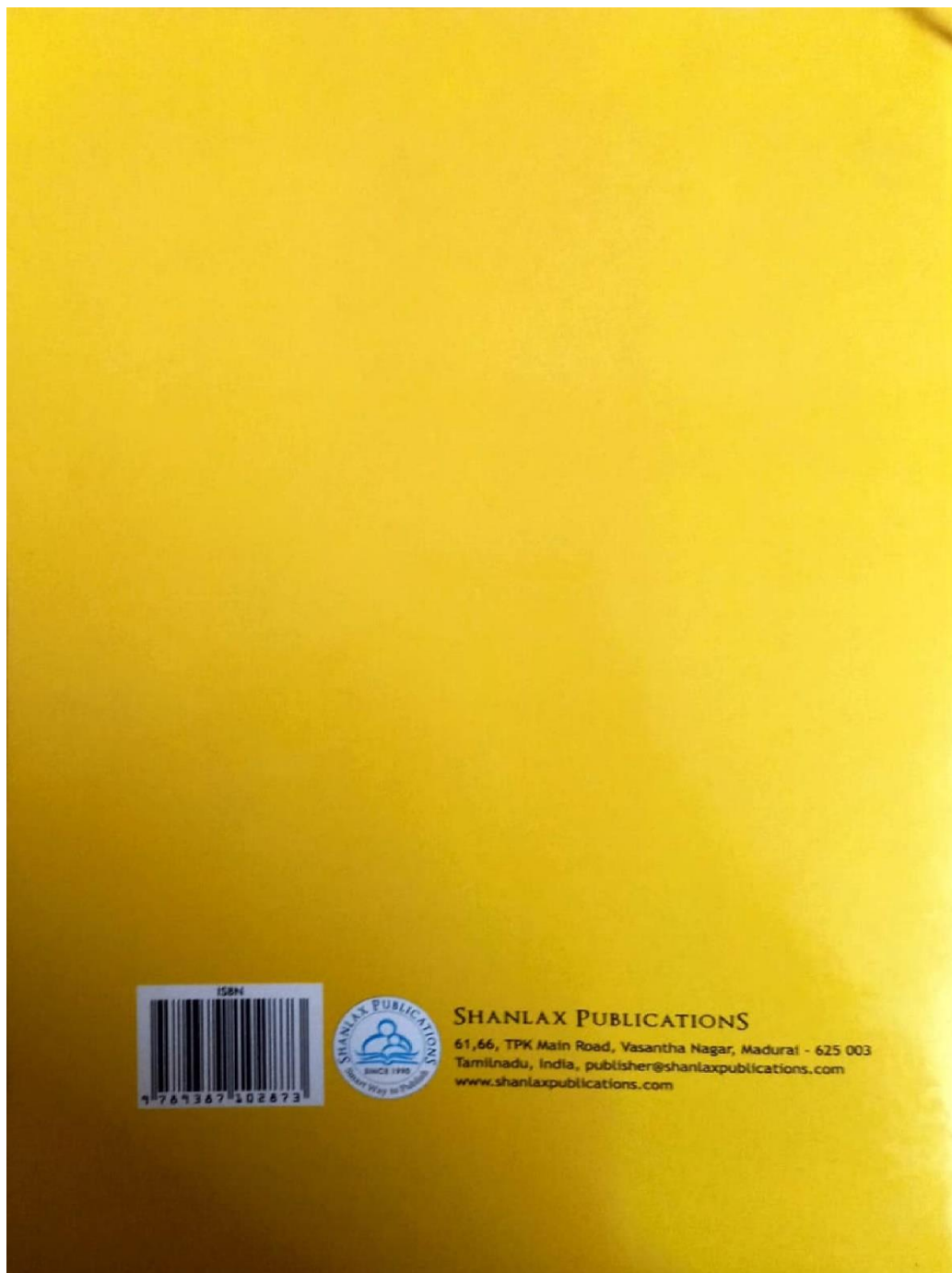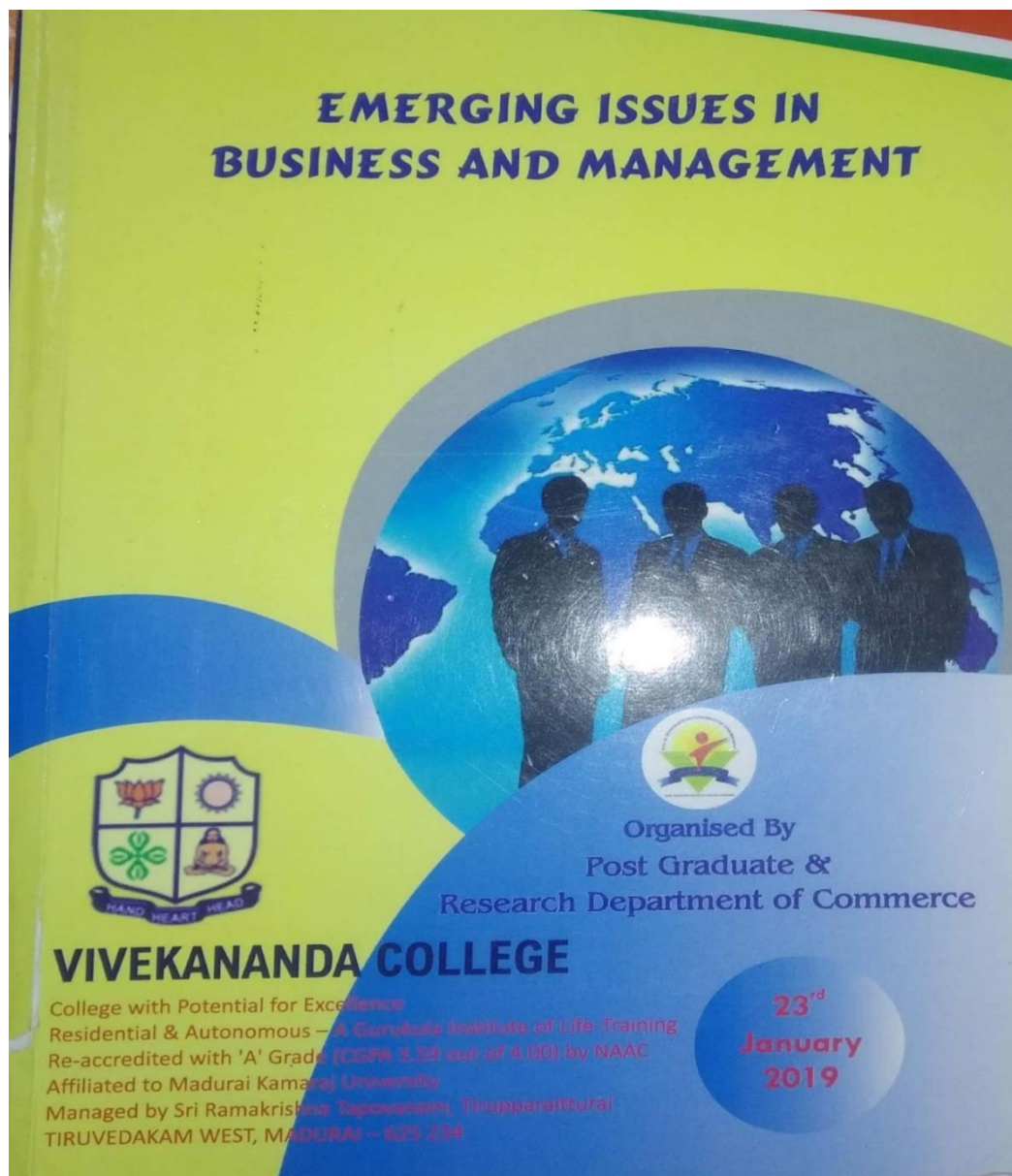
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# CHALLENGES AND STRATEGIES IN GREEN BANKING

**Mrs. P. Sathyapriya**
Assistant Professor, Department of Commerce Banking and Insurance
Dr.N.G.P. Arts and Science College, Coimbatore

**Abstract**
The Banking industry plays an important role in economic growth and environmental protection by promoting environmentally sustainable and socially responsible institutions. A green bank is a financial institution, typically public or quasi-public, that uses innovative financing techniques and market development tools in partnership with the private sector to accelerate deployment of clean energy technologies the banking of this kind can be termed as "Green Banking". Change is the need of the hour for survival in all spheres. Taken by the Green banking as a concept is a proactive and smart way of thinking towards future sustainability. Adoption of Green banking practices will not only be useful for environment, but also benefit in greater operational efficiencies, a lower vulnerability to manual errors, fraud, and cost reductions in banking activities. This paper has made an attempt to highlight the major services, challenges, opportunities, strategies of Green Banks in India.
**Keywords:** Environment protection, global warming, Green banking financial products, & Mobile banking, online banking.

## Introduction

Environment sustainability is the design and provision of products and services that incorporate and promote waste minimization, effective use and reuse of resources. Its aim is to protect the environment for the benefit of current and future generations. It is all about meeting needs and seeking a balance between people, the environment and the economy. According to the United Nations, sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development and preservation of environment are now recognized globally as overriding imperatives to protect our planet from the ravages inflicted on it by mankind. Various global initiatives are underway to counter the ill-effects of development that we encounter today such as carbon foot print, global warming, climate change, fickle weather, floods, droughts, pollution, high greenhouse gas emissions, etc., while still there is no consensus among the countries on sharing the burden of ecological footprint, most of the countries have been taking aggressive measures to tackle global warming and climate change.

## Concepts of Green Banking

Green banking means promoting environment friendly practices and reducing carbon footprint from banking activities. This comes in many forms viz., using online banking instead of branch banking, paying bills online instead of mailing them, opening of commercial deposits and money market accounts in online banks etc.Green banking refers to the efficient and effective use of computers, printers and servers to optimize the use of energy and waste-less paper. One of the important ways in which banks can implement green banking is by promoting the use of online banking among customers. Online banking helps reduce paperwork and the need to travel to bank branches. This positively impacts the environment. This facility is beneficial for banks, as it reduces operational costs and increases efficiency.

## Evolution of Green Bank

First Green Banking was founded in 2009 in the state of Florida. Based in Eustis and Clermont, Florida, USA, First Green Banking is a customer-driven community bank providing personalized service, localized decision- making and proven technology by promoting a positive environment that is acceptable to the community. State Bank of India, India's largest commercial bank, took the lead in setting high sustainability standards and completed the first step in its 'Green Banking' initiative with Shri O.P.Bhatt, Chairman, and SBI inaugurating the bank's first Wind farm project in Coimbatore.

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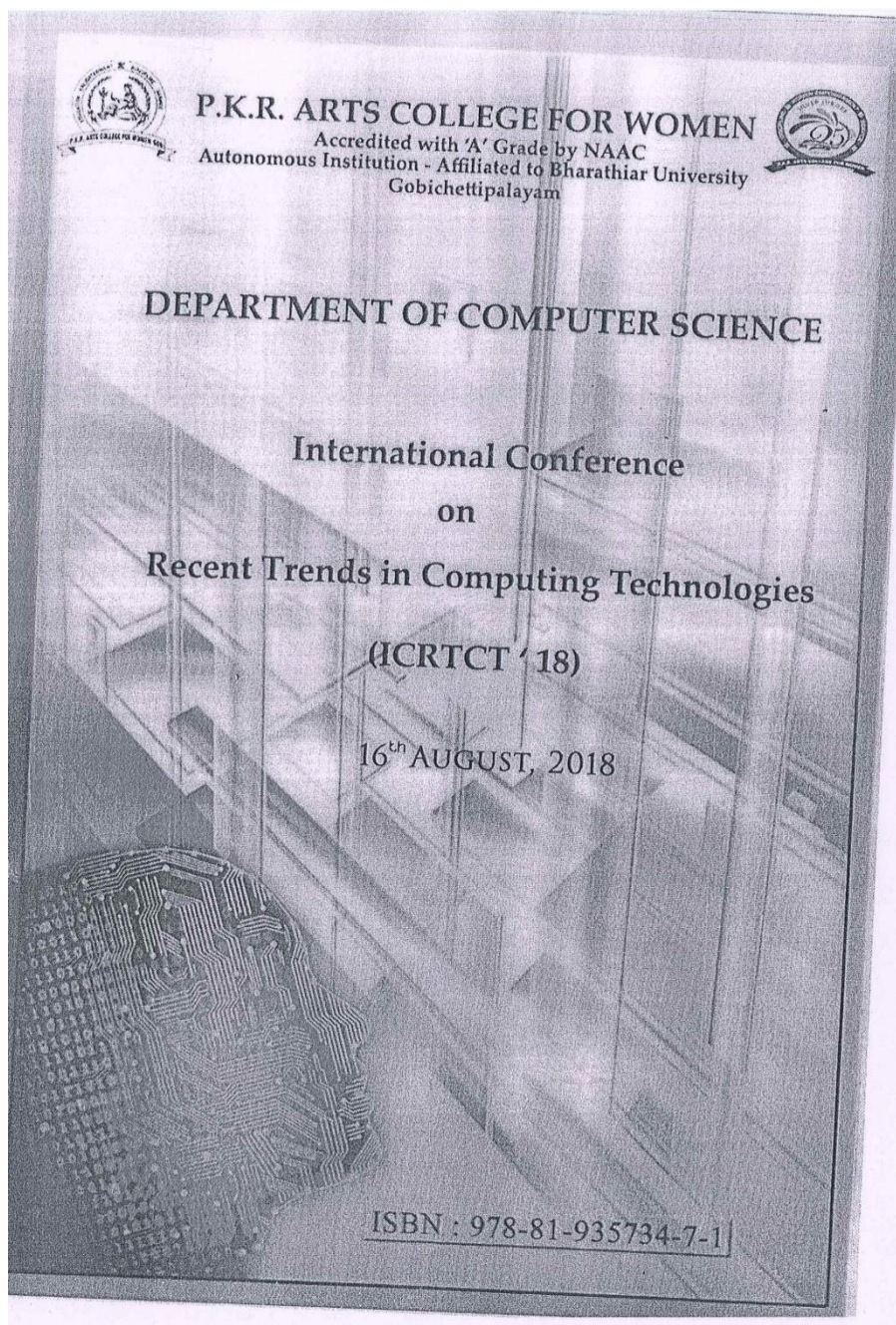| | **Dr. N.G.P. ARTS AND SCIENCE COLLEGE** | **NAAC** |
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T.S.Anushya Devi[1]

[1]Research Scholar, Department of BCA, PSGR Krishnammal College for Women, Coimbatore.

## ABSTRACT

Information Technology has a positive impact on other disciplines. Using today's technology, Agriculture and Information Technology are integrated with each other. Use of IT in agriculture will lead to improvements in productivity. For this purpose, the raw data is transformed into useful information through data mining. The analysis of these agricultural data base with different data mining methods may have some advantages in agriculture. Data mining software application includes various methodologies that have been developed by both commercial and research center. These techniques have been used for industrial, commercial and, scientific purpose. For example data mining has been used to analyze large datasets and established useful classification and patterns in the data sets. Agriculture and Biological research studies have been used for various techniques of data analysis including, natural trees, statistical machine learning in other analysis methods. Data Mining Techniques have led over various methods to gain knowledge from vast amount of data. There are the various research tools available for the large amount of data. Data mining has more technique to analyze the large amount of data like various classification algorithms. There are various data mining research tools available for analysing the large amount of data. Data Mining tools like WEKA and various algorithms like Bayesian classification Algorithm, Rule based classification and classification algorithms like Bayesian classification Algorithm, Rule based classification and classification of Decision tree.

Keywords: Information Technology, data mining, cluster, agriculture, classification

# A STUDY ON BIOMETRIC AUTHENTICATION TECHNIQUES – APPLICATIONS, CHALLENGES

Mrs. M. Rathi[1], Dr.A.V.Senthil Kumar[2]

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[2]Professor, Department of MCA, Hindusthan College of Arts and Science, Coimbatore, Tamilnadu, India

## ABSTRACT

The growth of Information and Communication Technology (ICT) has enabled the usage of computers globally. This has forced the users to store or retrieve their confidential information in a more secured manner. Authentication is the method of verifying an individual's identity based on the characteristics one can remember or based on the objects

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they possess or based on the physiological or behavioral characteristics. This paper discusses the secured form of authentication technique i.e the biometric authentication, its advantages and presents an in depth knowledge in various biometric technologies, their applications and research challenges that exist in different biometric authentication techniques.

**Keywords:** Authentication, Biometric technologies, Applications, Challenges

# AN EFFICIENT APPROACH FOR ATTRIBUTION AND CHARACTERIZATION OF MEDICINAL INFORMATION STANDARDS UTILIZING CLASS-BASED CLUSTERING OF THERAPEUTIC RECORDS

Mrs.R.S.Padma Priya[1]  Dr.P.SenthilVadivu[2]

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[2]Head of the Department, Department of Computer Applications, Hindusthan College of Arts and Science, Coimbatore
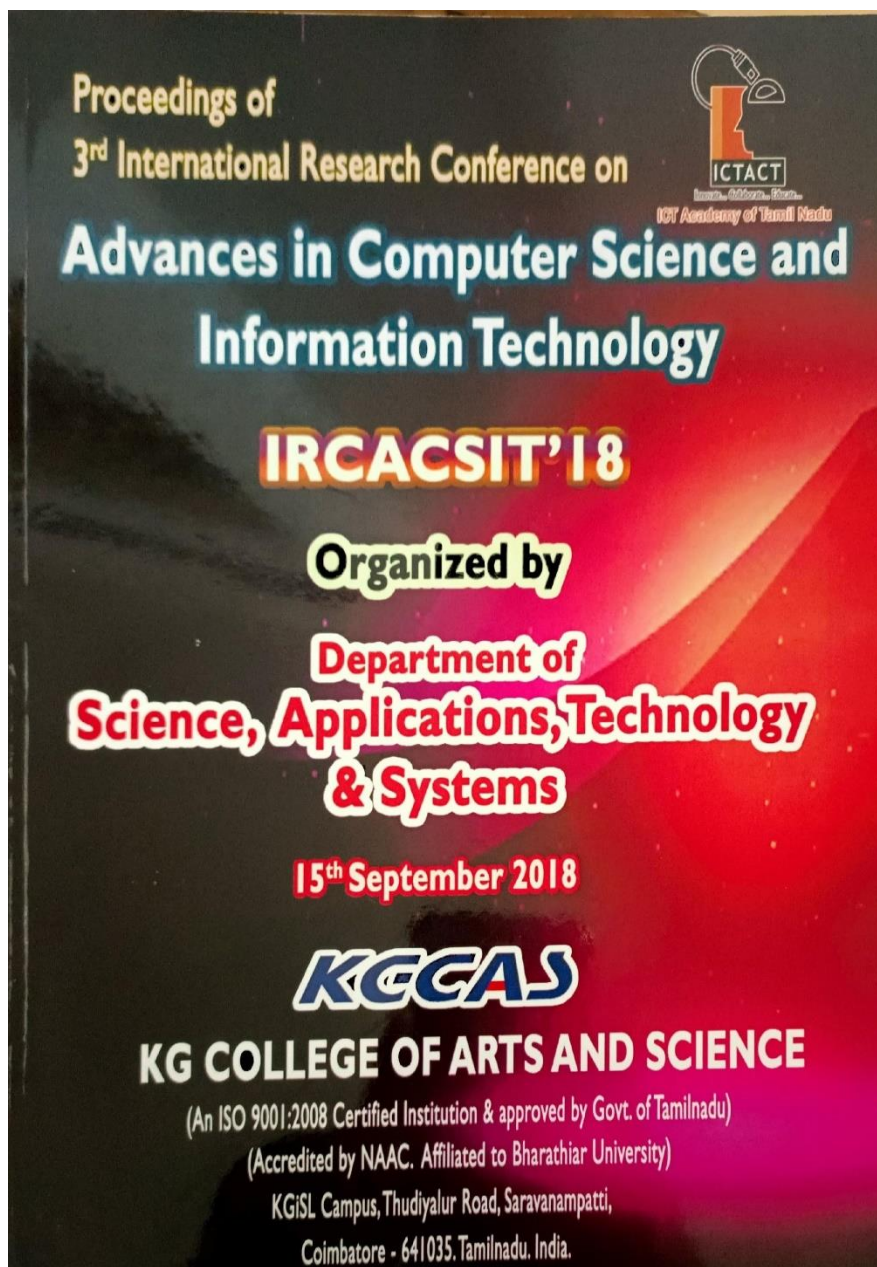
**ABSTRACT**

Medical information is normally not free from missing qualities and this is likewise obvious when information is gathered and tested through different clinical preliminaries. Existing Imputation methods don't address the issue of high dimensionality and apply separate capacities that additionally have the security of high dimensionality. There is a need to turn up with inventive methodologies and techniques for exact and e cient investigation of restorative records. This exploration proposes an enhanced imputation approach called IM-CBC (Imputation in Class-based bunching) and a classifier named as the Class-Based-Clustering Classifier (CBCC-IM). Tests are performed on the benchmark datasets and the recorded outcomes utilizing IM-CBC imputation approach are contrasted with ten attribution approaches utilizing classifiers KNN, SVM and C4.5 and to the CBCC classifier utilizing Euclidean separation and fluffy Gaussian comparability capacities. Results got demonstrate that the execution of classifiers is enhanced or at least closer to the current methodologies. CBCC-IM classifier records most noteworthy exactness when com-pared to every other classifier on benchmark datasets, for example, Cleveland, Ecoli, Iris, Pima, Wine and Wisconsin.

**Keywords:** Clustering, Imputation methods, KNN, SVM, CBCC

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# THYROID DISEASE CLASSIFICATION USING EVOLUTIONARY MULTIVARIATE KERNAL SVM PREDICTION METHOD

K.GEETHA, S. REKHA, B.SIVARANJANI
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## ABSTRACT

Thyroid disorders are common among the world wide population. This disorders posses' 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 bayed classifier.

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

## 1. INTRODUCTION

According to a recent study published by the daily Times of India, one in ten adults in India suffers from hypothyroidism. This estimation is found on the basis of a survey conducted by Indian Thyroid Society. The study also depicts awareness for the thyroid disease and is ranked 9th when compared to other common diseases like asthma, cholesterol, depression, diabetes, heart problem and insomnia. Medical practitioners say that the symptoms of thyroid are similar to other disorders. However, the survey revealed that only 50%, of the survey population are aware of thyroid disorder; know that there are diagnostic tests for detection of this disease [3]. Thyroid disorders damage the normal functioning of the thyroid gland which causes abnormal production of hormones leading to hyperthyroidism. The occurrence of hypothyroidism in the developed world is estimated to be about 4-5%. Hypothyroidism may cause high cholesterol levels, an increase in blood pressure, cardiovascular complications, decreased fertility, and depression if not properly treated.

Hence creating awareness among the public about the symptoms and types of this disease and its diagnosis plays a crucial importance of the hour. The main objective of this research work is to show the classification of more significant features from the available raw medical dataset which helps the physician to arrive at an accurate diagnosis of Thyroid among public.

This paper is organized in such a way that section 2 elaborates about thyroid disease types, symptoms and the ill effects. Section 3 deals with the background study conducted by various authors. Section 4 focuses towards the proposed methodology of thyroid classification supported by the results and discussion in section 5.

## 2. OVERVIEW OF THYROID

The thyroid is an organ present in the human body and is considered to be a part of the endocrine or the hormone, system. It is located in the human neck below the Adam's apple. The main purpose of thyroid is to

**6. Dr. S.Rekha & Dr. B.Sivaranjan**



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## ANALYSIS ON IOT AND INTEGRATION OF CLOUD COMPUTING

ICRTCT-C-05

S.Rekha and B.Sivaranjan
Dr. N.G.P. Arts and Science College (Autonomous), Coimbatore, Tamil Nadu, India

**ABSTRACT**

Cloud computing is a visualization technology model for on-demand access to shared pool of configurable resources that can be easily provisioned for as Infrastructure (IaaS), software and applications (SaaS). The integration of the sensor network with the cloud provides storage and computational resources .This way the scalable network will be reliable and secured. Internet of things (IOT) is a emerging field with computational and storage capacity. IOT scope is very wide and includes sensing, communicating and networking of devices deployed that has potential to grow on large scale in future.

## ROLE OF CLOUD COMPUTING IN EDUCATION

ICRTCT-C-06

Bharath.S, Poovarasan.V and Nirmala.A
Dr. N.G.P. Arts and Science College (Autonomous), Coimbatore, Tamil Nadu, India

**ABSTRACT**

Education plays an important role in maintaining the economic growth of a country. Now a days the classroom teaching is changing and students are becoming more technology oriented and Therefore in his changing environment, it's important that we think about the latest technologies to incorporate in the teaching and learning process. One of the latest technologies prevailing now days is Cloud Computing. By sharing IT services in the cloud, educational institution can outsource noncore services and better concentrate on offering students, teachers, faculty, and staff the essential tools to help them succeed. This paper focuses on the impact of cloud computing on the education system and how we can provide the quality education by using the above technology.

## SOFTWARE-DEFINED NETWORKS FOR CLOUD COMPUTING

ICRTCT-C-07

Divya.E, Priya.J and R.Rajesh Kanna
Dr. N.G.P. Arts and Science College (Autonomous), Coimbatore, Tamil Nadu, India

**ABSTRACT**

Network Management and Network virtualization for cloud computing systems have become absolutely active research areas in the last years. More recently, the advent of the Software-Defined Networks (SDNs) introduced new concepts for deal with these issues, starting new research initiatives adapted to the development and application of SDNs in the cloud. The goal of this paper is to analyze these opportunities, showing how the SDN technology can be engaged to develop, organize and virtualized cloud networking. Besides discussing the theoretical aspects similar to this integration, as well as the ensuing benefits, we present a practical a study based on the integration between OpenDaylight SDN controller and OpenStack cloud operating system.

## 7. Dr. R.Rajesh Kanna & Dr. S.Dinesh Kumar

ICRTCT-D-48

### AN EFFECTIVE SENTIMENT ANALYSIS ON SOCIAL MEDIA DATA ANALYSIS USING MAPREDUCE TECHNIQUES AND HADOOP FRAMEWORK

R.Rajesh Kanna and S.Dinesh Kumar
Dr. N.G.P. Arts And Science College (Autonomous), Coimbatore, Tamil Nadu, India

**ABSTRACT**

The Sentiment Analysis is the process use to determine the semantic orientation of the reviews. There are many algorithms are exists for the sentiment classification. Support vector machines are a specific type of machine learning algorithm used for many statistical learning problems, such as text classification, spam filtering, face and object recognition, handwriting analysis and countless others. Ideas and opinions of peoples are influenced by the opinions of other peoples. Lot of research is going on analysis of reviews given by peoples. Big data is an assortment of large data sets where data is present either in structured or unstructured form. With the advent of social media websites, online user opinions are acquiring more heed of researches because beneficial information about different subjects is available on social media. In this paper we proposed a system which involves collecting data from social network using the Google, Flipkart, Twitter and Facebook API's. Then, the challenges of big data a resolved using Hadoop through MapReduce framework where the complete data is mapped and reduced to smaller
sizable data to ease of handling and finally includes analyzing the collected data and represent the results through graphs.

ICRTCT-D-51

### AN INVESTIGATION ON ADVERSE DRUG REACTIONS AND AVAILABLE METHODS IN DATA MINING PROCESS

K.M.Deepa Lakshmi., A.Prakash..
Hindusthan College of Arts And Science , Coimbatore, Tamil Nadu, India.

**ABSTRACT**

Symptoms of prescribed medications are a common occurrence. Electronic healthcare databases present the opportunity to identify new side effects efficiently but currently the methods are limited due to confounding. Gigantic looks into in the drug advancement process right now assume a vital part on the post promoting drug security. As of late quick improvement of computational techniques for adverse drug reactions (ADRs) has pulled in high enthusiasm for the network of data innovation. This work gives an overview on a tremendous assortment of computational techniques on ADRs. Specifically, we for the most part talk about wellsprings of information and their attributes, and in addition an arrangement of computational strategies in light of information and systems utilized, including their focal points and constraints.

ICRTCT-D-53

### MELANOMA SKIN CANCER DETECTION USING IMPROVED RBF CLASSIFIER

K.THENMOZHI
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**ABSTRACT**

Melanoma is a category of cancer that develops from the pigment-containing cells recognized as melanocytes. Melanomas usually ensue in the fur but may arise in the jaws, guts or ogle. This paper tends to two distinct frameworks for identification of skin growth in dermoscopy pictures. The primary framework utilizes worldwide strategies and the second framework utilizes neighborhood highlights and the classifier. Henceforth, melanoma is effortlessly to distinguish utilizing with help of worldwide strategies and neighborhood highlights. Skin Disease prediction has become important in a variety of applications such as health insurance, tailored health communication and public health. Due to the costs for dermatologists to monitor every patient, there is a need for an computerized system to evaluate a patient's risk of melanoma using images of their skin lesions captured using a standard digital camera. The traditional diagnosis technique aims at improving the quality of existing diagnostic systems by proposing advanced feature selection and classification methods.RBF neural network derives classification. For this classification (RBF neural network)this paper proposed new learning method using K means clustering. This paper focuses on the detection of skin lesion as a literature survey.

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# A Comparative Study on Communication Architecture of Unmanned Aerial Vehicles and Security Analysis of False Data Dissemination Attacks

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*Abstract* - **A vehicular ad-hoc network (VANET) presents wireless communication with vehicles and vehicles to road side kit's. In VANET the frequent path failures, the high mobility, frequently disconnected topology and network traffic density which may affect the reliability of data transmission and routing. These problems are solved using the UAV supported VANET architecture having U2V/V2U communication. Unmanned Aerial Vehicles (UAV), which can fly unconventionally or can be activated remotely without carrying any individual personnel. Unmanned Aerial Vehicles (UAVs) have been extensively used for several applications. Ad-hoc networking between UAVs (FANET- Flying Ad-hoc Networks) can crack the troubles happening from a fully infrastructure supported UAV networks [2]. This work presents various communication architectures based on various criteria. We have proposed decentralized multi-layer UAV ad-hoc network supported vehicular ad-hoc network architecture along with explore the system components. This work analyses and compares the various false data dissemination attacks and impact of those attacks on various architectures.**

*Keywords— Vehicular ad-hoc network; Unmanned Aerial Vehicle; Flying ad-hoc networks; Decentralized; Dissemination*

## INTRODUCTION

A vehicular ad-hoc network presents wireless communication among vehicles and vehicles to road side kit's. In VANET the frequent path failures, the high mobility, frequently disconnected topology and network traffic density which may affect the reliability of data transmission and routing [1]. These problems are solved using the UAV supported VANET architecture having U2V/V2U communication. Unmanned Aerial Vehicles (UAV), which can fly freely or can be operated remotely of without carrying any individual workers. Ad-hoc networking between UAVs (FANET- Flying Ad-hoc

Networks) can work out the troubles happening from a completely transportation based UAV networks [2].

*Applications*

UAVs have a great prospective to build numerous applications in both military and civilian domains.

### A. Research Challenges

There are a multitude of challenges associated with UAV, solving which are crucial for safe and reliable employment of such systems in civilian and military scenarios. The following challenges have been identified as being threats to the use of UAV in VANET.
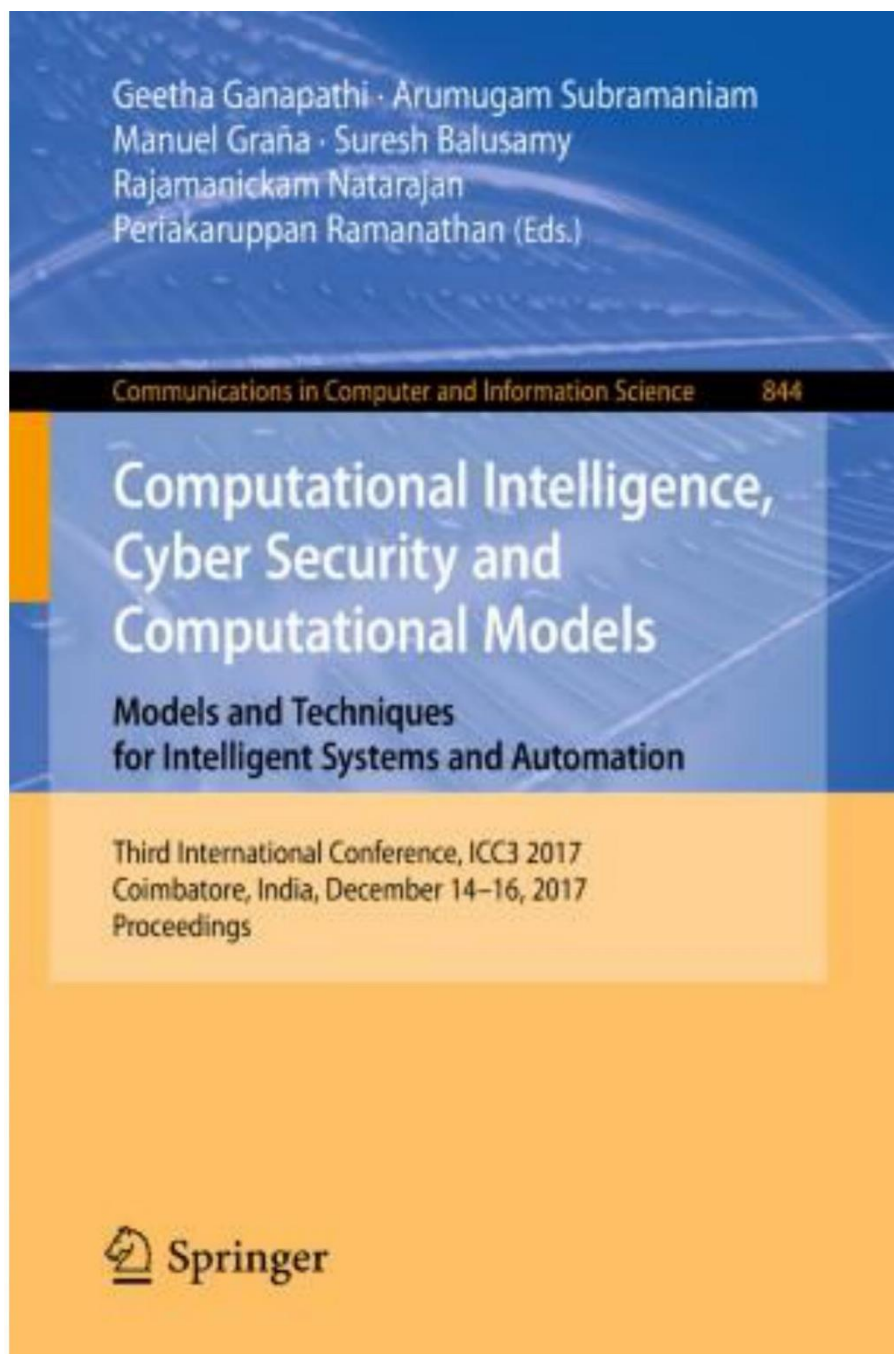
- Reliability
- Traffic density
- Communication among node's
- Conserving energy of a node
- Security. Security plays a major role in UAV to VANET communication

*Significance of Architecture*

- Provides overall network design.
- Reviews the IDS that safeguard the group's general systems and networked devices e.g. routers and switches.
- Identifies how the network is designed and implemented.
- Multi-layer architecture provides inbuilt elasticity for coping with development and/or changing traffic patterns and traffic mixes.
- Allows common transport arrangements for multi-services network.

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Manuel Graña · Suresh Balusamy
Rajamanickam Natarajan
Periakaruppan Ramanathan (Eds.)

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## A Study on Various Cyber-Attacks and their Classification in UAV Assisted Vehicular Ad-Hoc Networks

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**Abstract.** Unmanned Aerial Vehicles (UAV) systems are autonomous systems that can fly separately or it can be functioned remotely without carrying any individuals. These networks prone to various attacks. The people are benefited from the current growth of networking and cyber world; however, the rapid development of cyber world has furthermore contributed to immoral practices by persons who are using the technology to utilize others. That type of utilization of cyber world with the intension of accessing unauthorized or protected information, collapsing networks, spying, data and currency theft is called as cyber-attack. There is a tremendous increase in Cyber-attacks in number and complexity greater than the previous era, and also lack of awareness on cyber-attacks which has provided many people/societies/groups reveal the true to these attacks. The main aim of this study is to do a brief study of these cyber-attacks in order to create alertness about the various types of attacks and their action so that suitable security methods can be originated against such attacks and also this paper explores the impacts and parameters affected by the most dangerous cyber-attack namely, false data dissemination attack on UAV networks for further implementation and research.

**Keywords:** Unmanned Aerial Vehicle · Cyberspace · Cyber-attack

## 1 Introduction

A vehicular ad-hoc network (VANET) provides wireless communication among vehicles and vehicles to road side equipment's. In VANET the frequent path failures, the high mobility, frequently disconnected topology and network traffic density which may affect the reliability of data transmission and routing [2]. These problems are solved using the UAV assisted VANET architecture having U2V/V2U communication. Unmanned Aerial Vehicles (UAV) systems are autonomous systems that can fly separately or it can be functioned remotely without carrying any individuals. UAVs are directly attach to satellites or ground control stations to handover the data. Multiple UAVs can form an ad-hoc network. UAV ad-hoc networks can solve the problems of

**10. Dr.M. Kalimuthu**

# A Review on a Wakening the Force in Women Entrepreneurs in Indian Economic–Present Scenario

Dr.M. Kalimuthu, Assistant Professor, Commerce, Dr.N.G.P. Arts and Science College, Coimbatore.

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*"When Woman Moves Forward, The Family Moves, The Village Moves And The Nation Moves"*

-Pandit Jawaharlal Nehru

**Abstract:** Women's Activities Are Very Interesting as They Have Great Source of Knowledge and Innovation. Women Are Experienced In Balancing And Handling Difficulties. Play A Major Role In Empowering Poor Women By Providing Them Dignity, Self-Esteem And Economic Independence. Banks Are Also Benefitted As Their Loans Get Repaid In The Process. The Training And Education Plays Vital Role In Building Entrepreneurs Especially Women Due To Low Women Literacy Rate In The Country. The Indian Government Has Come Up With Various Subsidy Schemes For Such Budding Women Entrepreneurs. Thus, Governments Across The World As Well As Various Developmental Organizations Are Actively Undertaking Promotion Of Women Entrepreneurs Through Various Schemes, Incentives And Promotional Measures. The Present Study Is Taken Up To Examine The Various Policies And Schemes Initiated By The Government And Other Institutions To Encourage Women Entrepreneurs, To Examine major Constraints Faced By Women Entrepreneurs In India And To Review Successful Women Entrepreneurs In India.

**Keywords:** Women Entrepreneurs, Government Policies and Schemes, Challenges Faced by Women Entrepreneurs.

## I. INTRODUCTION

WOMEN owned businesses are highly increasing in the economies of almost all countries. The hidden entrepreneurial potentials of women have gradually been changing with the growing sensitivity to the role and economic status in the society. The educated women do not want to limit their lives in the four walls of the house. 'Women Entrepreneur' is a person who accepts challenging role to meet her personal needs and become economically independent. In order to bring women into the main stream of economy and society, Government of India has launched several development programmes for women. Small loans can make good business sense among the women. It has been noticed that women in particular stand to gain a lot from micro credit because it gives the man independent means of generating wealth and becoming self reliant in a society threat does not offer them much scope for entrepreneurship and since it is women who run the household, a higher standard of living for women ensures better governance and a healthier and more prosperous future for their children and a better future for the nation.

## II. REVIEW OF LITERATURE

Sayani and Sathyanarayana (2011) studied that in India women with varied social, economic, political, regional and linguistic back grounds constitute half of the nation. The socio economic conditions of women are the key for overall growth and development of the country.

Entrepreneurship is a concept assumed to be sex neutral. Even then in India, women entrepreneurship is still in its infancy.

## III. OBJECTIVES OF THE STUDY

- To study various policies and schemes initiated by the Government and other Institution to encourage Women Entrepreneurs.
- To give brief profile of some selected women entrepreneurs.
- To explore the challenges faced by women entrepreneurs.

## IV. METHODOLOGY

The study is based on secondary data, which is collected from the published reports of journal and different websites. The paper attempt to explore the concepts, obviously it's an exploratory research where earlier studies on the subject matter has been read dressed to give in sight to phenomenon.

## V. WOMEN ENTREPRENEUR

Women entrepreneurs may be defined as the women or a group of women who initiate, organize and operate a business enterprise. The Government of India has defined women entrenreneurs as an enternrise owned and controlled

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# "A Study On Consumer Satisfaction In Hotel Industry"
## (With Special Reference to Annapoorna Group of Hotels in Coimbatore, Tamilnadu)

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### I. INTRODUCTION

One of the biggest contemporary challenges of management in service industries is providing and maintaining customer satisfaction. Overwhelming customer demanding for quality products and service has in recent years become increasingly evident to professionals in the tourism and hotel industry. Customer satisfaction represents a modern approach for quality in enterprises and organizations and serves the development of a truly customer – focused management and culture. Customer satisfaction measures offer a meaningful and objective feedback about client's preferences and expectations. Marketing and management sciences now – a – days are focusing on the coordination of all the organizations' activities in order to provide goods or services that can satisfy best specific needs of potential customers. Hotels are one part of hospitality industry, which has evolved from the very modest beginning of families and landowners who opened their homes to travellers.

### II. STATEMENT OF THE PROBLEM

Competitors prospering in the new global economy recognized that measuring customer satisfaction is the key. The basis of consumer satisfaction or dissatisfaction lies in mankind's ability to learn from past experiences – accordingly, consumer preferences are constantly being updated by the way of the learning process. Learning theory postulates "... a given response is reinforced either positively or negatively to the extent that it is followed by a reward. Reward in turn, leads to an evaluation that the purchase was satisfactory ... and hence it can exert an effect on brand beliefs and attitudes. The probability of engaging in a similar buying act will be increased if there are positive consequences in the act of purchase and use and vice versa".

Given the vital role of customer satisfaction, a variety of research has been devoted to investigating the determinants of satisfaction. In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy. Customer satisfaction is considered to be one of the most important outcomes of all marketing activities in a market – oriented firm. The obvious need for satisfying the firm's customer is to expand the business, to gain a higher market share and to require repeat and referral business, all of which lead to improved profitability. Studies conducted by Cronin and Taylor (1992) in service sectors such as: banking, pest control, dry cleaning and fast food; found that customer satisfaction has a significant effect on purchase intentions.

### III. SCOPE OF THE STUDY

The customer satisfaction has become an essential business issue as organizations have realized the significant outcomes achieved when providing effective customer service. For hospitality and tourism, satisfaction has always been important.
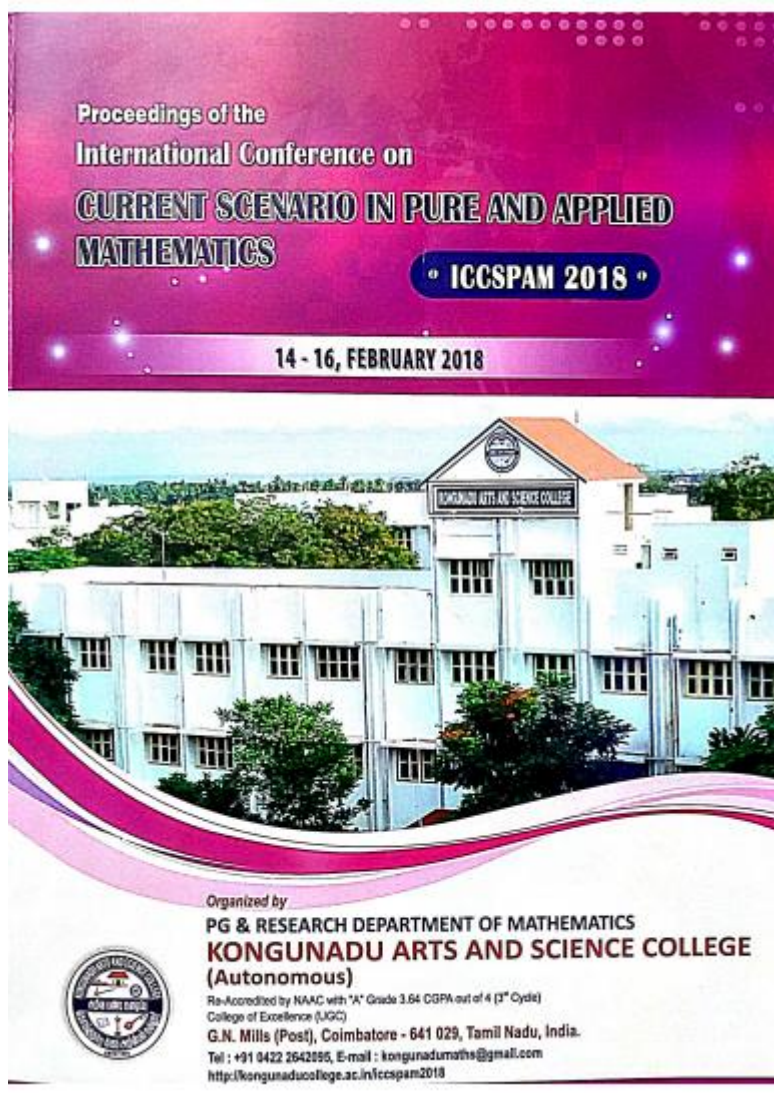
With regard to other industries different researchers and institutions have undertaken a lot of scientific and detailed studies. But, Indian hotel business with reference to customer satisfaction has not been able to draw the attention of researcher to any noticeable extent. Hence, this study examines and analyses the satisfaction level of customers with reference to "Sree Annapoorna Sree Gowrishankar" group of Hotels at Coimbatore. The study would help firms to employ the outcome to develop appropriate customer satisfaction policies.

### IV. OBJECTIVES OF THE STUDY

The study intends to pursue the following specific objectives with reference to "Sree Annapoorna Sree Gowrishankar" group, Coimbatore.

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## LIST OF PAPERS

# General Formula for Numerical Computation of $W(G)$ of Bridge Molecular Graph

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## ABSTRACT

The construction and investigation of topological indices that could be used to describe the molecular structures is one of the directions of mathematical chemistry. Early chemical tests proved that there exist close inner relationships between the bio-medical and bio characteristics of any chemicals and their molecular structures. Topological index has wide acceptance in physical, organic, medicinal chemistry, bio chemistry, toxicology, and environmental sciences. In this paper, by means of drug molecular structure analysis, we present the Wiener topological index of widely used chemical structures which often appear in drug molecular graphs.

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- William Thurston

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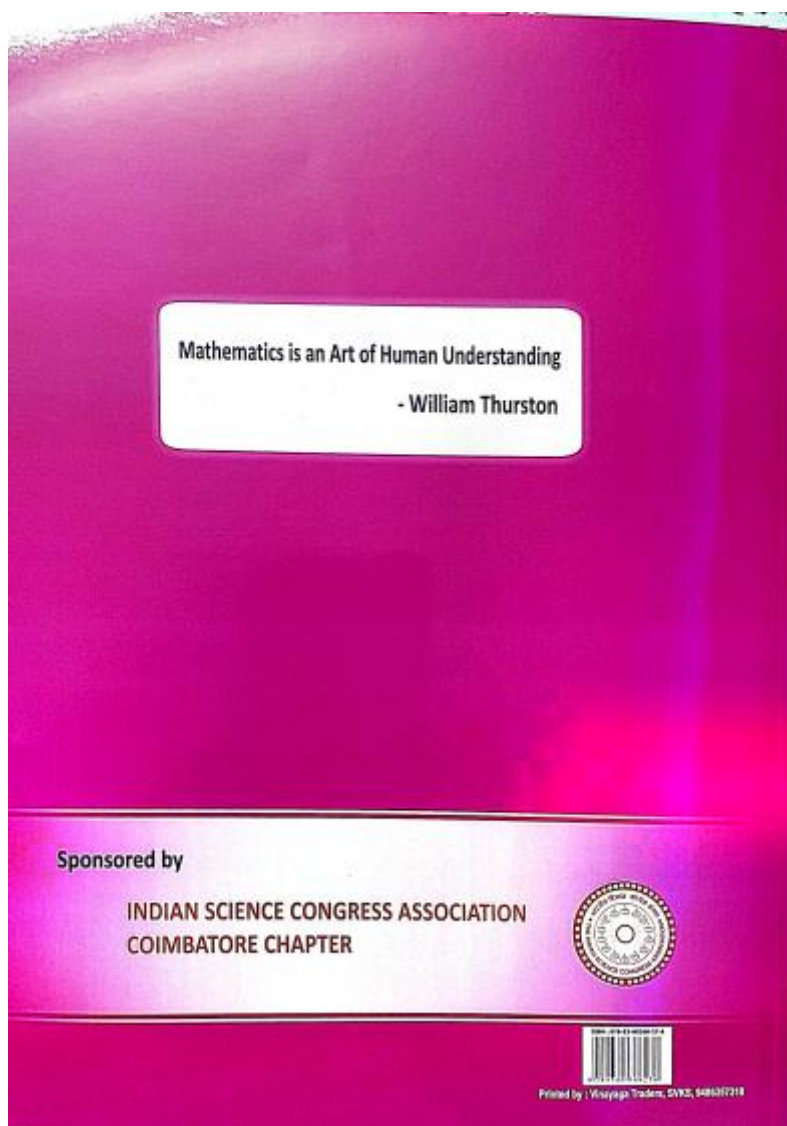| | **Dr. N.G.P. ARTS AND SCIENCE COLLEGE** | **NAAC** |
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**13.Dr.B.Leelavathi**

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# An Efficient Worm Detection System using Multi Feature Analysis and Classification Techniques

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*Abstract*— one of the popular ways of detecting worm is signature based pattern matching. However, the signature of worm should be stored in advance for the pattern matching detection. Moreover, it calculates the similarity of input data using stored signature. Therefore, the storage problem and calculation overheads occur undoubtedly. Also, detection possibility is dropped, when malicious code is modified. So we use machine learning algorithm technique for detecting malicious worm executable and benign executable. In this paper, distinguished features of Portable Executable headers, Application Programming Interface (API) function calls and DLL files are used. The machine learning algorithm, Adaboost ensemble classifier, Naïve Bayesian classifier and Decision tree are applied for improving to detection rate. The performance of each algorithm firstly evaluated to find the most outperformed algorithm each for classifying benign executable and malicious worm executable. And then, these features were combined to detect worm more precisely.

*Keywords— Portable Executable Header, DLLs, API function calls, Machine Learning algorithms, Efficient Worm Detection.*

## I. INTRODUCTION

While the computer application technology develops at full speed, the security of computer system makes people worried. The security of the computer system becomes more vulnerable than ever and faces more security threats because the technological progress brings the complexity of the application environment. Computers in the network cannot be protected due to the open characteristic of the internet and its lack of central control and global view. Under this network environment, malware and worm has stronger reproduction and destructive ability. Modern computer and communication infrastructures are highly susceptible to various types of attacks. A common way of launching these attacks is using malware (malicious software) such as worm, virus, Trojan or spyware [1,2]. Propagation of worm might result in havoc to private users, commercial companies and governments. As a case in point, a single instance of malware installed on a computer which belongs to a computer network, can result in the loss, or unauthorized utilization or modification, of large amounts of data and cause users to question the reliability of all the information on the network. High-speed digital

communication channels enable malware to propagate and infect hosts very quickly and so it is essential to detect and eliminate new (unknown) malware in a prompt manner.

A majority of antivirus vendors deploy signature based worm detection techniques that utilized predefined signatures' set (signature is unique hex code strings in each malware or infected files). Its procedure is as follows: (1) a new worm starts propagating on a large scale, (2) forensic experts of antivirus companies get its samples to study its behavior, (3) they assign it a signature which is effectively a sequence of its instructions, (4) the signature is added to the database, (5) customers are notified to update their signatures' set, and (6) customers update their signatures' set and are finally protected against this worm. It suffers from three main shortcomings: (1) it is unable to detect new worm and unknown worm, (2) the size of the signatures' set and the time of matching signatures will increase exponentially, and (3) during the period between the appearance of a new (unknown) worm and the update of the signatures' set of the anti-virus clients, millions of computers are vulnerable to the new worm. Moreover, worm writers often use sophisticated packing techniques to evade signatures and the advent of more sophisticated worm writing techniques such as polymorphism and metamorphism makes it even harder to detect a malware. Polymorphic and metamorphic malware change their appearance every time when they propagate.

Spinellis [3] has proved that the detection of bounded length viruses is an NP-complete problem. Therefore, we should use a variety of heuristic knowledge to identify malware and improve the accuracy of judgments. A number of non-signature based malware detection technique have been proposed recently. These techniques analyze several features of malware, such as machine-level code, disassembled code, static calls from the disassembled code, and run-time API (application programming interface) calls. The common bottlenecks of such techniques are their high false positive rate and large processing overheads.

The format information of binary executable is affected by its behavior. Binary executable follows basic format, such as PE (portable executables) and ELF (executable and linking

**14. Dr.R.kousalya**

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# BIG DATA APPROACH FOR WEATHER BASED CROP INSURANCE

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## ABSTRACT

In Agriculture sector where the government and their supporting agencies need to make numerable decisions based on the adverse weather factors and the reports submitted to them. One of the essential issue is the crop insurance based on weather factors. Data mining and analytics techniques are necessary approaches for accomplishing practical and effective solutions for this problem. In addition to adverse weather conditions, variability in crop yields, input levels and damage statistics for a pre-identified crop or variety of crops information which are more relevant for farmers to make use of critical farming decisions. This paper focuses on the analysis of categories of data in agriculture and provides the bigdata approach for crop insurance data base on the background of insurance industry reform combined with the analytics technologies and to create the awareness of crop insurance scheme through online self-service weather insurance for farmers .Big Data involves the Multi criteria decisions involving spatially identifying the affected areas,Weather data, Farmer interviews, dry and wet management areas, Expert opinion of local extension officers, historical weather data, website data would help insurance companies to select the crop insurance products.

**15. Dr.R.kousalya**

ICRTCT-D-16

# SURVEY ON DIAGNOSIS AND PROGNOSIS OF BREAST CANCER DISEASE USING DATA MINING TECHNIQUES

...ngeetha and R.Kousalya
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ABSTRACT

...t cancer is a serious syndrome found among the females all over the world also it is a very big emerging issue in ...ng countries like India. The use of Data mining approaches in medical domains is increasing rapidly. This study Paper ...arizes the reviews , the technical articles and the result of various data mining techniques such as support vector ...ne, Neural Network, Naive Bayes, Decision Tree in diagnosis of breast cancer. The current research is being carried ...ing the data mining techniques to enhance the breast cancer diagnosis and prognosis.

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**16.Dr.R.kousalya**

ICRTCT-N

# ROLE OF DEEP LEARNING FOR CONTENT BASED IMAGE RETRIEVAL USIN CONVOLUTIONAL NEURAL NETWORK

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## ABSTRACT

Digital images are growing rapidly due to the advancement in mobile and computer devices. Hence, the size of multim content repositories has increased rapidly in applications such as social media, medical images, digital libraries, world web etc. Content Based Image Retrieval(CBIR) is the application of Computer Vision(CV) techniques to the image retr problem. "Content-based" means that the search analyzes the contents of the image rather than the metadata su keywords, tags, or descriptions associated with the image. To derive high level semantic features from images Ma learning is used. Deep Convolutional Neural Network(CNN) have recently attracted a lot of interest within the com vision community for Content Based Image Retrieval. This paper focuses on role of deep learning for content based i retrieval using CNN.

**17.A.Nirmala**

ICRTCT-

# MAP-REDUCE TECHNIQUE FOR EFFICIENT BIG DATA SEARCH PROCESSING

M.Mohammed Meeran, D.Arun Prasath and A.Nirmala
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## ABSTRACT

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

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**18. A.Nirmala**

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# ROLE OF CLOUD COMPUTING IN EDUCATION

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## ABSTRACT

Education plays an important role in maintaining the economic growth of a country. Now a days the classroom te
changing and students are becoming more technology oriented and Therefore in his changing environment, it's
that we think about the latest technologies to incorporate in the teaching and learning process. One of the latest tec
prevailing now days is Cloud Computing. By sharing IT services in the cloud, educational institution can outsourc
services and better concentrate on offering students, teachers, faculty, and staff the essential tools to help them succ
paper focuses on the impact of cloud computing on the education system and how we can provide the quality edu
using the above technology.

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## 19. C.kumuthini & K.Gomathy

ICRTCT-B-46

# HIPI: A REVIEW ON HADOOP MAPREDUCE FRAMEWORK USING IMAGE PROCESSING IN BIG DATA

P.S.Vijayalakshmi, K.Gomathy and C.Kumuthini
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Dr. N.G.P. Arts and Science College, Tamilnadu,India

## ABSTRACT

Nowadays, Big data is growing vey faster in the world. *Big data is* the *large* volume of *data* that consists of both structured and unstructured on a day-to-day basis. But it's not the amount of *data*. Big data is the data which includes sensor data, biometric data, Geospatial, Healthcare, power grid, transport, search engine and in Social networks. Hadoop process large amounts of data, in parallel, clusters of commodity hardware in a reliable and fault-tolerant manner. In this paper we review the Image processing using Map reduce technique with the help of HIPI (the image processing Tool).

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**20. Bharathi Anbarasan**

# ENHANCED CYBER SECURITY THROUGH ARTIFICIAL INTELLIGENCE

Bharathi Anbarasan
Dr. N. G. P. Arts and Science College (Autonomous), Coimbatore, Tamil Nadu, India

## ABSTRACT

Cyber-attacks are on the rise in our daily lives. Security agencies are perennially in a fight against cyber-attacks and are constantly looking for improved technological solutions to help them in their effort. Artificial Intelligence and Machine learning have capabilities to process and analyse huge data for information andalsolearn from such processing to effectively detect malignant activity and has great scope to support cyber security agencies. Recent trends indicate attack strategies also incorporate AI concepts thus making fighting them more challenging. There is unanimous recognition that a combined effort incorporating benefits of both machine learning and human intelligence will greatly enhance security efforts.

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## 21. P.Dinesh Kumar

ICRTCT-D-34

## A SURVEY OF DATA MINING TECHNIQUES FOR SOCIAL NETWORK ANALYSIS

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## ABSTRACT

Social network has gained remarkable attention in the last decade. Accessing social network sites such as Twitter, Facebook, LinkedIn and Google+ through the internet and the web 2.0 technologies has become more affordable. People are becoming more interested in and relying on social network for information, news and opinion of other users on diverse subject matters. The heavy reliance on social network sites causes them to generate massive data characterized by three computational issues namely; size, noise and dynamism. These issues often make social network data very complex to analyse manually, resulting in the pertinent use of computational means of analysing them. Data mining provides a wide range of techniques for detecting useful knowledge from massive datasets like trends, patterns and rules [44]. Data mining techniques are used for information retrieval, statistical modelling and machine learning. These techniques employ *data pre-processing, data analysis, and data interpretation* processes in the course of data analysis. This survey discusses different data mining techniques used in mining diverse aspects of the social network over decades going from the historical techniques to the up-to-date models, including our novel technique named *TRCM*. All the techniques covered in this survey are listed in the Table.1 including the tools employed as well as names of their authors.

## 22. R.Rajeshkanna

ICRTCT-D-

# AN EFFECTIVE SENTIMENT ANALYSIS ON SOCIAL MEDIA DATA ANALYSIS USIN MAPREDUCE TECHNIQUES AND HADOOP FRAMEWORK

R.Rajesh Kanna and S.Dinesh Kumar
Dr. N.G.P. Arts And Science College (Autonomous), Coimbatore, Tamil Nadu, India

## ABSTRACT

The Sentiment Analysis is the process use to determine the semantic orientation of the reviews. There are many algorit are exists for the sentiment classification. Support vector machines are a specific type of machine learning algorithm used many statistical learning problems, such as text classification, spam filtering, face and object recognition, handwri analysis and countless others. Ideas and opinions of peoples are influenced by the opinions of other peoples. Lot of rese is going on analysis of reviews given by peoples. Big data is an assortment of large data sets where data is present eith structured or unstructured form. With the advent of social media websites, online user opinions are acquiring more hee researches because beneficial information about different subjects is available on social media. In this paper we propos system which involves collecting data from social network using the Google, Flipkart, Twitter and Facebook API's. T the challenges of big data a resolved using Hadoop through MapReduce framework where the complete data is mapped reduced to smaller

sizable data to ease of handling and finally includes analyzing the collected data and represent the results through graphs

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## 23. R.Rajeshkanna

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# SOFTWARE-DEFINED NETWORKS FOR CLOUD COMPUTING

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## ABSTRACT

Network Management and Network virtualization for cloud computing systems have become absolutely active areas in the last years. More recently, the advent of the Software-Defined Networks (SDNs) introduced new co deal with these issues, starting new research initiatives adapted to the development and application of SDNs in The goal of this paper is to analyze these opportunities, showing how the SDN technology can be engaged to organize and virtualized cloud networking. Besides discussing the theoretical aspects similar to this integration, he ensuing benefits, we present a practical a study based on the integration between OpenDaylight SDN cont OpenStack cloud operating system.

## 24. Dr.D.Devi Aruna

ICRTCT-N-30

# ENERGETIC ROUTING TECHNIQUE USING LATENCY WISE PROMOTE NODE SELECTION ALGORITHM IN WSN

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## ABSTRACT

A wireless sensor network consists of spatially disseminated independent devices using sensors to jointly monitor environmental conditions, such as temperature, noise, vibration, pressure, motion or pollutants. The WSN contains a huge number of sensor nodes. These nodes are battery powered, The power efficiency of the sensors is also crucial. Due to this the network routing process is performed based on two states namely sleep and active state. In some critical circumstances low energy nodes go to active state and perform communication processes. Some sensor nodes suddenly lose energy causing communication failure. This increases energy consumption, network overhead, and end to end delay. Hence the proposed Energetic routing Technique (ERT) is used to obtain the energy efficient communication in wireless environment. This ERT efficiently monitors the low energy nodes and provides the high energy neighbor node list for further packet forwarding in sensor network and Constructing the Latency wise promote node selection algorithm is applied to remove maximum delay node, also choose lesser delay node for packet forwarding. Therefore it reduces the energy consumption, network overhead, and end to end delay.

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## 25. K.kavitha

ICRTCT-D-20

# SURVIVAL STUDY ON DATA STORAGE AND TRANSACTION SECURITY USING AUTHENTICATION TECHNIQUES

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**ABSTRACT**

Cloud computing is information technology (IT) model that allows the ubiquitous access to shared pools of configurable system resources and higher-level services provisioned with lesser effort. Cloud computing provides number of advantages in information technology. Cloud storage is an essential service of cloud computing that are prevalent as it present low-cost and on-demand utilization of large storage and processing resources. Security is an essential barrier to comprehensive prevalence of cloud computing. Security is mainly prioritized portion for any cloud computing environment during data storage and data transaction. Cloud computing approach is linked with users sensitive data stored both at client's end and cloud servers. For improving the security level, authentication techniques are used for allowing the authenticated user to access the data. But, complexity of the security is high when decentralization of data over the wide area of network. In addition, existing methods failed to improve the authentication accuracy and data confidentiality. Our main objective of the work is to improve the security level during the data storage and data transaction by using cryptosystem techniques.

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