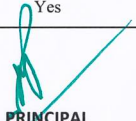


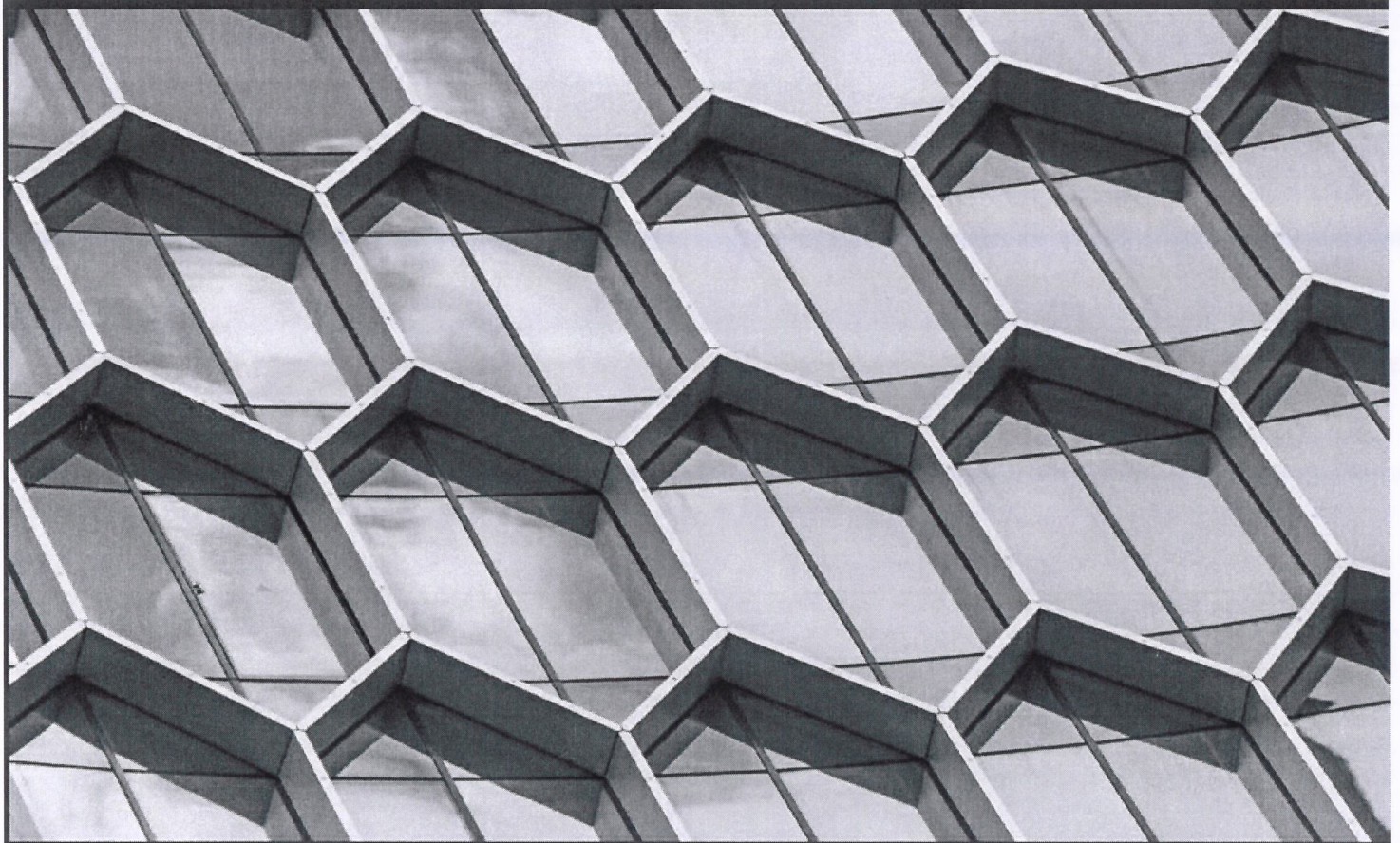
3.4.4 Number of books and chapters in edited volumes published per teacher during the last five years

Sl. No.	Name of the teacher	Title of the book published	Title of the chapters published	Year of publication	ISBN number	Whether at the time of publication Affiliating Institution was same Yes/No	Name of the publisher
1	Dr. Ashok Koujalagi	Trees in Data Structures	NA	2021	978-620-3-19277-3	No	Lambert Academic Publishing
2	Dr. Ashok Koujalagi	Prototype for Devcie Monitoring Through Wireless LAN	NA	2020	978-620-2-51700-3	No	Lambert Academic Publishing
3	Dr. Ashok Koujalagi	Detection of the black hole attack in mobile AdHoc network	NA	2018	978-613-9-94273-2	No	SIA OmniScriptum Publishing
4	Dr. Ashok Koujalagi	Applications of Field-Based Routing to Wireless AdHoc Networks with ARP	NA	2020	978-93-86954-07-7	No	Edupeia Publications
5	Dr. Ashok Koujalagi	NA	Internet of Things (IoT) Enabling Technologies and Applications—A Study	2020	978-981-15-3514-7	No	Springer
6	Dr. Ashok Koujalagi	NA	Impact of Call Drop Ratio Over 5G Network	2022	978-1-6684-7000-8	Yes	IGI-USA
7	Dr. Ashok Koujalagi	Securing Routing Protocols through Information Corroboration	NA	2020	978-93-84144-82-1	No	Research India Publication
8	Dr.B Sujatha	NA	A Review of Deep Learning Methods in Automatic Facial Micro-expression Recognition	2023	978-981-99-0608-6	Yes	Springer
9	Dr.B Sujatha	Development of Secure and Novel Methods of Image Encryption Using an Image as Key	NA	2023	978-81-19102-61-7	Yes	Research Highlights in Mathematics and Computer Science
10	Dr B Srinivas Raja	Digital image and speech processing	NA	2022	978-93-95191-29-6	Yes	Deccan International Academic publishers
11	Dr B Srinivas Raja	Microcontroller and Embedded System	NA	2022	978-81-959187-9-9	Yes	GCS Publisher
12	Dr Biswa Ranjan Barik	Microstrip Patch Antenna : Design and Performance Analysis	NA	2020	978-620-3-04011-1	Yes	LAP LAMBERT Academic Publishing
13	Dr Biswa Ranjan Barik	Dielectric Resonator Antenna: Design and Analysis	NA	2020	979-8569511914	Yes	Amazon Kindle Publisher
14	Dr Biswa Ranjan Barik	Dielectric Resonator Antenna	NA	2020	978-620-3-19369-5	Yes	LAP LAMBERT Academic Publishing
15	Dr.R Tamilkodi	Java Programming Language	NA	2022	939519106-6	Yes	Deccan International Academic Publishers
16	Dr.R Tamilkodi	Computer Networks and Switches	NA	2022	978-93-95191-22-7	Yes	Deccan International Academic Publishers
17	Dr. D. VENKATESWARLU	Proceedings of the Indian Geotechnical Conference 2019 IGC - 2019 Volume 3	Effect of Soil Slope on Failure Mechanism of Soil-Nailed Structures by Aluminium Nails and Bamboo Nails	2021	978-981-33-64448	Yes	Springer Nature
18	Dr. D. VENKATESWARLU	Problematic Soils & Geoenvironmental Concerns	Load-Settlement Behaviour of Soft Marine Clay treated with Metakaolin & Calcium Chloride	2020	978-981-15-6237-2	Yes	Springer, Singapore
19	B. Kavya Santhoshi	Innovations in Electrical and Electronics Engineering	A Cost-Effective PV-Based Single Stage Conversion System for Power Backup	2020	978-981-15-2255-0	Yes	Springer
20	Dr. D. ravi Kishore	Advances in Smart Grid Technology	A Novel Power Electronic-Based Maximum Power Point Tracking Technique for Solar PV Applications	2020	978-981-15-7244-9	Yes	Springer
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26	Dr. V. Suresh & Dr. B. Kavya Santhoshi	Power Electronics	NA	2023	978-81-961690-1-5	Yes	DECCAN INTERNATIONAL ACADEMIC PUBLISHERS
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32	Dr. V. SUBRAHMANYAM	Synthesis, Characterization and Mechanical Testing of Nano Rice Husk Ash Composite Materials	NA	2021-22	978-93-92591-31-0	YES	Iterative International Publishers IIP
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34	Dr.Shrija Madhu	NA	Social Media Enchances the Happiness Levels of Various Age Groups in Society:An Empirical Study	2023	978-81-19039-67-8	Yes	BP International
35	Dr.Shrija Madhu	NA	Development of Secure and Novel Methods of Image Encryption Using an Image as Key	2023	978-81-19102-61-7	Yes	BP International


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Trees in Data Structures

Non linear Data Structures -Various types of Trees

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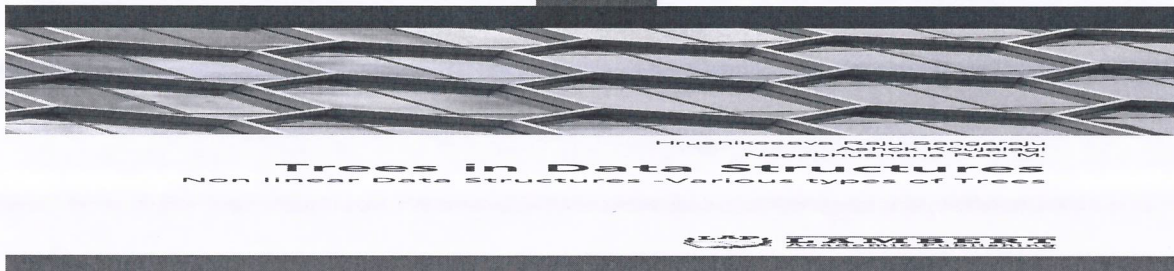


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Trees in Data Structures

Non linear Data Structures -Various types of Trees

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Nowadays, Non-linear data structures are very important in a variety of applications. The importance of trees is to make users understand any scenario in a beautiful manner. These trees whatever are discussed in the textbook are very much helpful in analyzing any real-time application and may apply this knowledge in simulating such applications. This book describes the fundamentals of Trees in the nonlinear data structures such as Binary Search Trees, AVL Trees, Red-Black Trees, Splay Trees, and B-Trees. Their operations and few examples are demonstrated. The kinds of trees discussed here are binary trees, Binary search trees, Adelson Velski Landis(AVL) Trees, Red-Black Trees, Splay Trees, and B-Trees are mentioned and their operations like searching, insertion, and deletion are also described with suitable examples.

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By (author) :
Hrushikesava Raju Sangaraju
Ashok Koujalagi
Nagabhushana Rao M.

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Category: Data communication, networks

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Wireless local area networking (WLAN) protocols are quickly becoming a standard solution for connecting many different types of devices together. The current local wireless protocols are 802.11, 802.11a, 802.11b, 802.11g, Bluetooth, HomeRF, and Ultrawideband. These protocols, developed within the last seven years, are making it easier to develop a local area network since the need for wires has been removed - a device no longer has to be fixed to a single location by a wire. The device can be moved at any time, and new devices can be introduced to a network with ease. The supporting company has developed an infrastructure called the Device-Centric services (DCS) that provides a set of device monitoring applications including automated meter reads, product break-notifications, and maintenance support. This infrastructure currently contains a wired network connecting the supporting company's devices into the backbone of their customer's network, where data is transmitted over the Internet into a company database. This current implementation is not compatible with all of the current devices and it requires that the data be transmitted along the customer's network backbone.

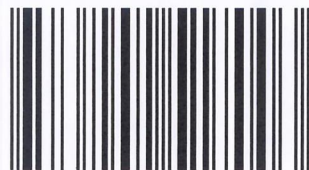


Ashok Koujalagi

Prototype for Device Monitoring Through Wireless LAN



Dr. Ashok Koujalagi is an Author, Professor and Researcher. He received his M.Sc degree from Bangalore Central University. And Ph.D. from Central University of Allahabad, he authored five books among two are International and he also has more than 26 research publications & Conference Proceedings indexed in ICI, Scopus, and Springer.



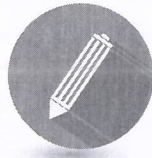
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Dear Sir/Madam,

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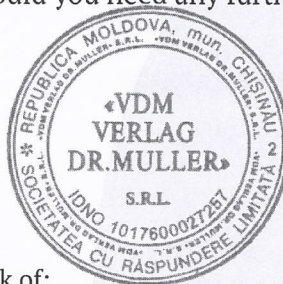
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Applications of Field-based Routing to Wireless Ad Hoc Networks With ARP

Biography

Dr. Ashok Koujalagi



Dr. Ashok Koujalagi is an Author, Professor and Postdoctoral Researcher. He did his Master's Degree in Computer Science (M.Sc) from Bangalore Central University. And he did his Ph.D. from Central University of Allahabad.

Presently he is working as an Assistant Professor & Postdoctoral Researcher in Post-Graduation Department of Computer Science, Basaveshwar Science College, (Rani Channamma University) Bagalkot, Karnataka, INDIA.

And he is also Professional member for various International Research Organizations / Associations like.

Institute of Research Engineers and Doctors - California, USA, World Academy of Science, Engineering and Technology - Connecticut, USA, Science and Engineering Institute- USA, International Association of Engineers-Canada, International Association of Computer Science and Technology- Singapore, International Economics Development Research Center - Hong Kong, Society of Digital Information and Wireless Communications- USA, Association for Computer Machinery - USA, British Science Association - London, UK, European Alliance for Innovation - Belgium, American Educational Research Association - USA, International Computer Science and Engineering Society - USA, International Management and Technology Research Association - USA.

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Subject: Acceptance of Book.

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Author's : Ashok Koujalagi, Dr. M. Jayapragash

Proposal No. 936

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Internet of Things (IoT) Enabling Technologies and Applications—A Study

D. K. Sreekantha ¹✉

Email sreekantha@nitte.edu.in

Ashok Koujalagi ²

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¹ NMAM Institute of Technology, Nitte, Karkala, Karnataka, 574110, India

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Chapter 11

Impact of Call Drop Ratio Over 5G Network

Jay Kumar Pandey

 <https://orcid.org/0000-0003-4086-5730>
Shri Ramswaroop Memorial University, India

Shahanawaj Ahamad

University of Hail, Saudi Arabia

Vivek Veeraiah

Adichunchanagiri University, India

Nishchal Adil

*Rungta College of Engineering and Technology,
India*

Dharmesh Dhabliya

*Vishwakarma Institute of Information
Technology, India*

Ashok Koujalagi

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*Godavari Institute of Engineering and
Technology (Autonomous), India*

Ankur Gupta

 <https://orcid.org/0000-0002-4651-5830>
Vaish College of Engineering, India

ABSTRACT

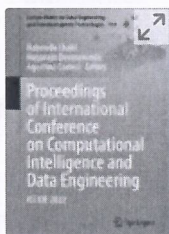
The 5G network is the main topic of this investigation. 5G is expected to be far more advanced than 4G since it makes use of three distinct bands of the network spectrum. The acronym "5G" refers to the latest generation of wireless communications. With 5G, communications will improve all across the world. The purpose of this research is to examine the consequences of the increasing call drop ratio in 5G networks. In other words, if a user's current session is interrupted, they will need to make a new connection to continue using the service. One area where 5G excels over its predecessors, 4G (and LTE), is in reducing latency. Also, there would be fewer lost calls for individuals utilizing VoIP because network uptime will have risen significantly. Reduced call failure rates lead to happier customers.



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A Review of Deep Learning Methods in Automatic Facial Micro-expression Recognition

[Lalasa Mukku](#)  & [Jyothi Thomas](#)

Conference paper | [First Online: 18 June 2023](#)

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Abstract

Facial expression analysis to understand human emotion is the base for affective computing. Until the last decade, researchers mainly used facial macro-expressions for classification and detection problems. Micro-expressions are the tiny muscle moments in the face that occur as responses to feelings and emotions. They often reveal true

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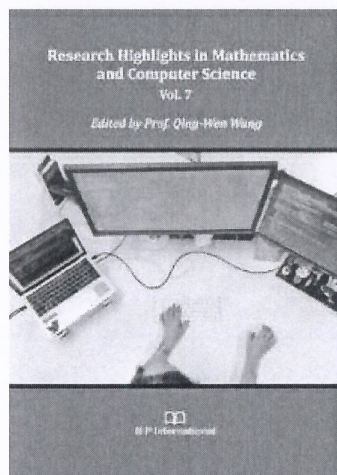
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Development of Secure and Novel Methods of Image Encryption Using an Image as Key

Shrija Madhu ; Mohammed Ali Hussain ; N. Leelavathy ; B. Sujatha

Research Highlights in Mathematics and Computer Science Vol. 7, 18 March 2023, Page 89-102

<https://doi.org/10.9734/bp/rhmc/v7/4297E>

Published: 2023-03-18

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Abstract

Encryption is one of the proven methods for securing documents from unauthorized access. Image Encryption can be applied to documents that are scanned and saved as images. Many text encryption methods are available but are not suitable for documents in image format. Three methods for image encryption are proposed in this article. Key Bitplane Encryption, Key Scan Encryption, and Key RGB Displacement Encryption are the proposed methods for encrypting images. All of these methods share the idea of using an image as the key to encrypt another image. These algorithms are examined for color and grayscale images, as well as for images of various sizes. The three methods outlined in the paper are examined for brute force and common attack types. For each method, a comparison using statistical methods is also given. The methods are implemented in Matlab, and the test images come from the Computer Vision Group Database.

Keywords: Bitplanes; image encryption; image decryption; pixel displacement; SCAN approach

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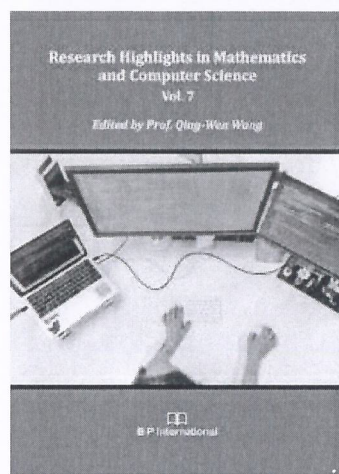
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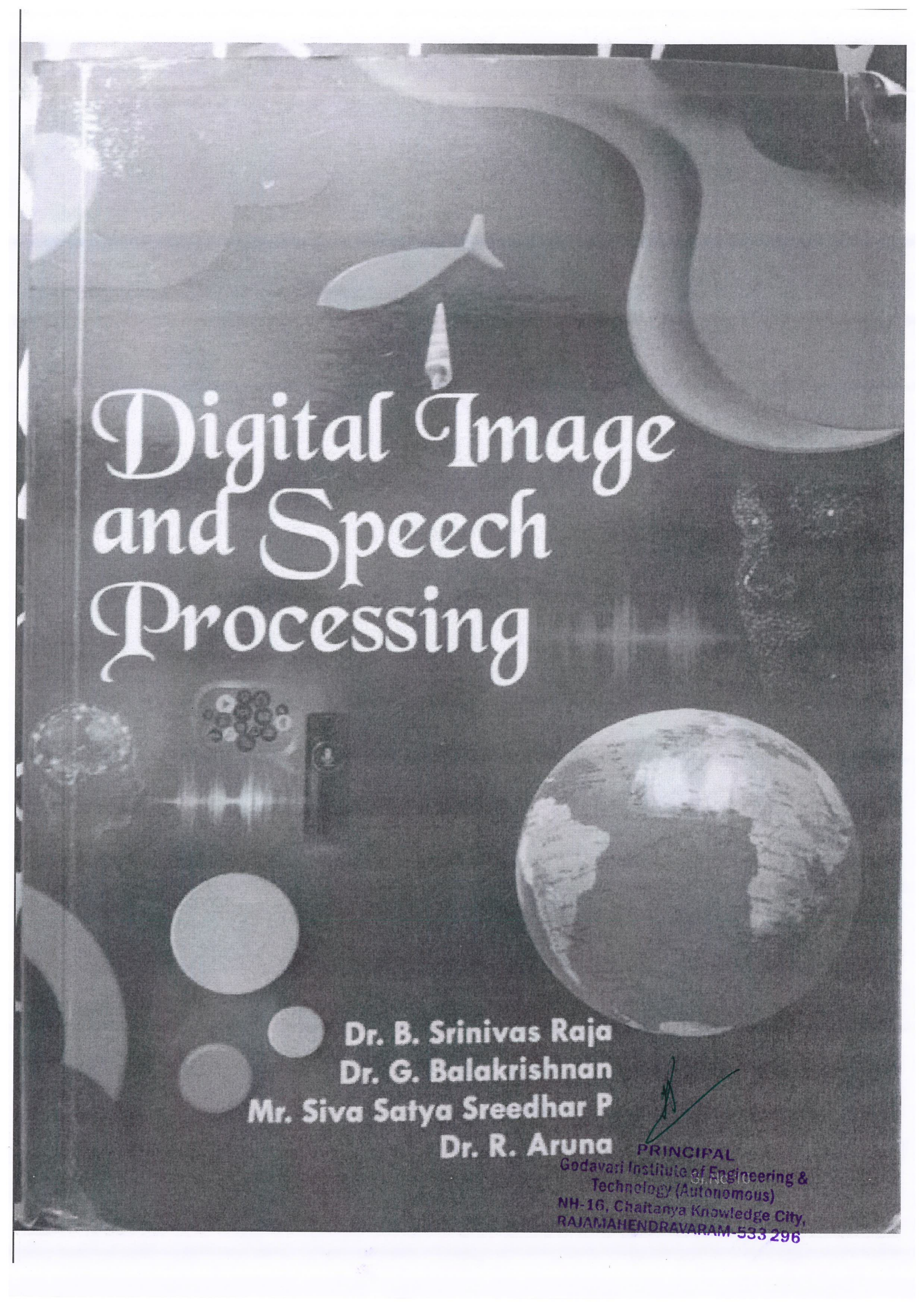
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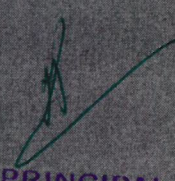
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Digital Image and Speech Processing

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PROCESSING

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DIGITAL IMAGE AND SPEECH PROCESSING

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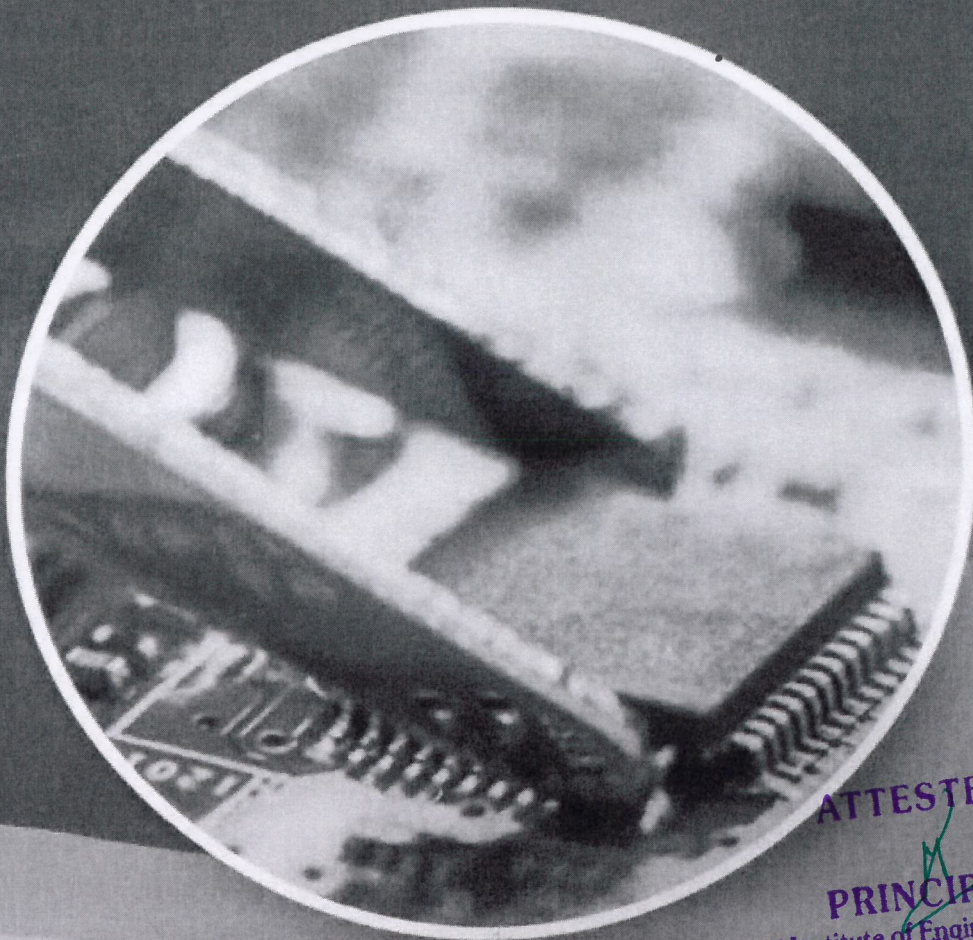
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MICROCONTROLLER AND EMBEDDED SYSTEM



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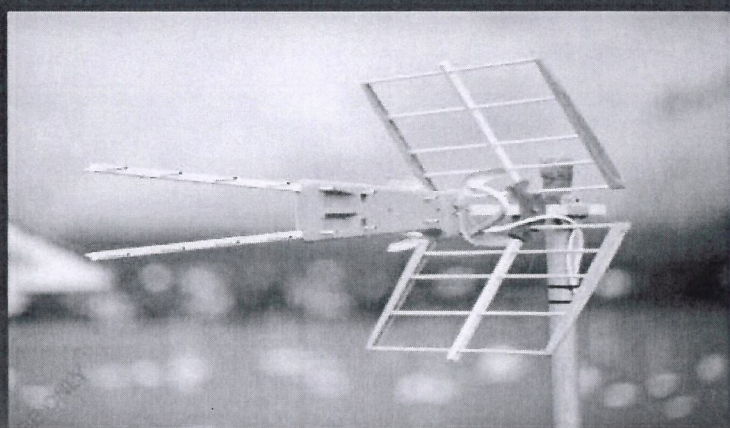
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A comparative performance analysis between Rectangular Transmission line feed, 1×2 Circular Patch Array, and Co-axial Feed MPA resonates at 2.4 GHz has projected. To differentiate the effect of patch and arrays on the performance of antenna Rectangular patch, Circular patch and $1 \times 2, 1 \times 4, 2 \times 4$ Circular patch array MPA have designed at 4.4 GHz which will helpful for the user to choose a suitable antenna at this frequency application. Here a brief idea about the effect of different parameters such as length, height, the width of patch, permittivity of different materials, and frequency on the performance of MPA has discussed. The impact of different materials on efficiency and effect of fringing field on microstrip line has also examined based on closed-form formulas. The output is based on HFSS and mat-lab code which has been generated through the mathematical formulas given by various researchers.



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Dielectric Resonator Antenna

In this Book a clear description about design and analysis of Dielectric Resonator Antenna has given. Hemispherical shaped DRA for WIMAX application has designed and simulated at 3.55 GHz resonant frequency and comparative analysis has done with a 3.55 GHz MPA. Here also design and analysis of conical shaped DRA and co-planar wave guide Fed rectangular dielectric resonator antenna (RDRA) have projected.

Dr.Kalirasu.A
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Biswaranjan Barik has completed his B.Tech in Electronic & Communication Engineering from BPUP, Boudkela, M.Tech From IIT, Kharagpur and Continuing his PhD in AMET Deemed University, Chennai. His Research Area in Wide band Antenna, and Signal Integrity for High Speed Digital Design.

Design and Analysis




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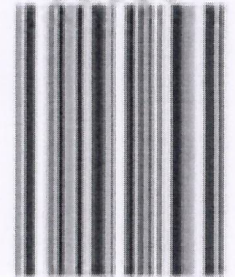


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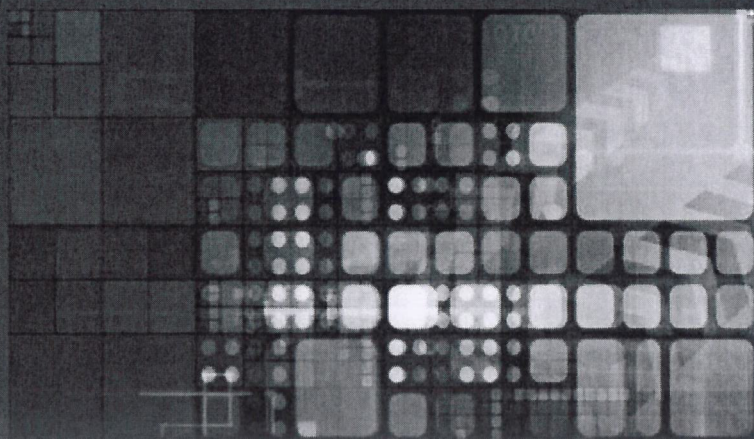
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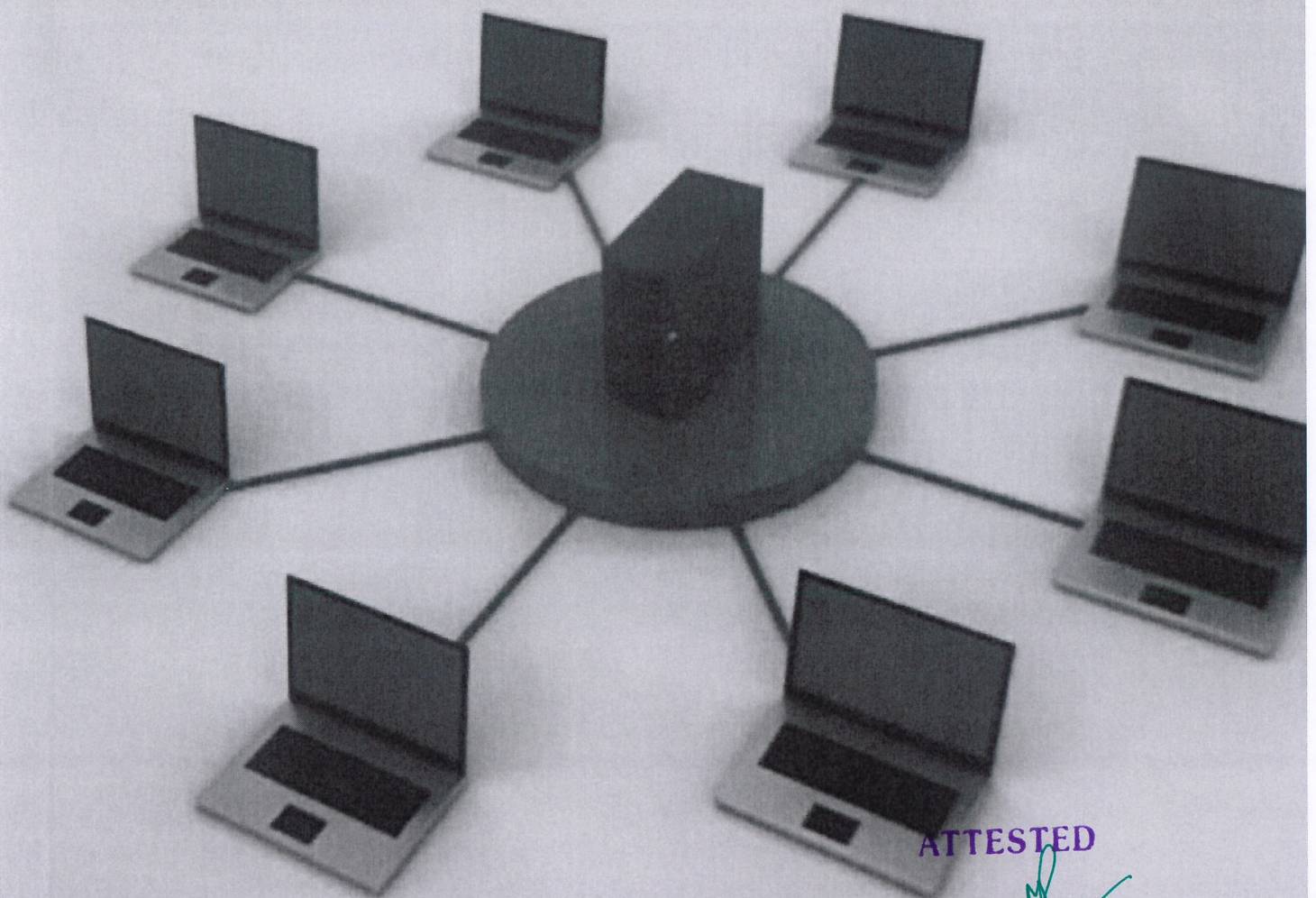
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Satyajit Patel
C. H. Solanki
Krishna R. Reddy
Sanjay Kumar Shukla *Editors*

Proceedings of the Indian Geotechnical Conference 2019

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Effect of Soil Slope on Failure Mechanism of Soil-Nailed Structures by Aluminum Nails and Bamboo Nails



Venkateswarlu Dumpa, G. Kumar, Chandra Shekhar Rayi,
M. Anjan Kumar, and G. V. R. Prasada Raju

Abstract In the present day scenario, improvement of ground is necessary in various occasions due to wide range of construction requirements. Various ground improvement techniques have been developed over the past few years. Increasing the load carrying capacity by inserting steel bars generally termed as soil nails is one of the effective techniques. These are mostly used in improvement of soil slopes. Wide range of materials can be used as soil nails. In the present study, hollow aluminum tubes and bamboos were used as soil nails for improving the ground characteristics. Model tests were performed for soil slope with different conditions of nail inclination. Further, these test results are compared with unreinforced soil. Parameters considered for the study are nail inclination and soil slope. Three nail inclinations are considered for the present study; they are 0° , 15° , and 30° with horizontal axis and two soil slopes they are 45° and 60° . Constant parameters considered for the study are soil, height, nail length, and nail pattern. The results obtained are compared with the conventional unreinforced soil slope for each case and curves for load versus settlement were developed for the same. From experimental results, soil slope with 0° nail inclination with horizontal axis gives the maximum load carrying capacity in all the cases, followed by 15° nail inclination with horizontal axis and then 30° nail inclination with horizontal axis.

Keywords Backfill · Reinforced soil · Soil nail · Unreinforced soil

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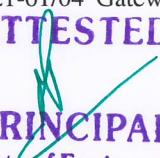
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Load–Settlement Behavior of Soft Marine Clay Treated with Metakaolin and Calcium Chloride



D. Venkateswarlu, M. Anjan Kumar, G. V. R. Prasada Raju,
and R. Dayakar Babu

Abstract A developing country like India has to show its development by leaps and bounds in the fields of infrastructure development, transportation, and communication system. The peninsular India is having a lengthy coastal belt of around 7700 km; except north all three sides of India is surrounded by Bay of Bengal in the east, Indian Ocean in the south, and Arabian Sea on the west. The areas surrounded by the coast are being utilized since ages. So, inevitably several national and international authorities are doing research and development on coastal structures. The various potential problems associated with this marine clay are land slippage slope stability, poor foundation support, and poor drainage. Owing to such soils of poor engineering properties, a great diversity of ground improvement techniques such as soil stabilization and chemical treatment is employed to improve their mechanical behavior, thereby enhancing the reliability of construction. Metakaolin is applied in soil stabilization for foundations or road subgrade. However, metakaolin along with calcium chloride treatment for these poor soils, as an alternative to the traditional “remove and replace” strategies commonly utilized was found to be satisfactory in the laboratory evaluation. Hence, the authors arrived at an optimum content of metakaolin mixed to soft marine clay, and then further, it is chemically treated with calcium chloride. The optimum dosage of calcium chloride in combination with the optimum content of metakaolin was evaluated from the tests conducted in the laboratory. Further, the authors studied the performance of soft marine clay beds prepared with different

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Innovations in Electrical and Electronics Engineering pp 561–568

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A Cost-Effective PV-Based Single-Stage Conversion System for Power Backup

B. Kavya Santhoshi & K. Mohana Sundaram

Conference paper | [First Online: 24 March 2020](#)

770 Accesses

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Abstract

Shortage of power is a severe problem in rural areas of India. This work aims at providing a feasible solution to this problem. When a power outage occurs, inverters are used as a backup power source in residential applications. In general, an inverter has to go through a two-stage process for power conversion from DC to AC since a special converter is required to boost the voltage to higher level. The inverters that are used for residential purpose consume electricity from grid in order to charge or discharge the battery of the inverter that usually causes overloading. These main disadvantages can be overcome with the use of Quasi-impedance-source inverter (QZSI). With the use of a single-stage conversion circuitry for AC application, an attempt to provide a cheap and economic renewable energy system has been made in this work.

Keywords

Photovoltaic Renewable Quasi-Z source Inverter

Single-stage conversion Sine PWM

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Advances in Smart Grid Technology pp 115–126

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A Novel Power Electronic-Based Maximum Power Point Tracking Technique for Solar PV Applications

D. Ravi Kishore, T. Vijay Muni & K. S. Srikanth

Conference paper | First Online: 23 September 2020

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Abstract

The conductance of solar cell was nonlinearly with various atmospheric changes, which had resulted in false MPP. To overcome this problem, the proposed system is educated with the neural network. Although incremental conductance can grant marginally better overall performance in case of rapidly various atmospheric conditions, the accelerated complexity of the algorithm will require larger steeply priced hardware and therefore can also have an advantage over MPPT solely in massive PV arrays. The shortcoming of the fuzzy logic approach is lack of expertise of the obligation cycle variation, which results in suited accuracy level with terrible dynamic characteristics. To overcome the problem, PWM technique is applied, and the corresponding duty cycle is varied to trigger the inverter.

Keywords

Incremental conductance **MPPT** **Solar power efficiency**

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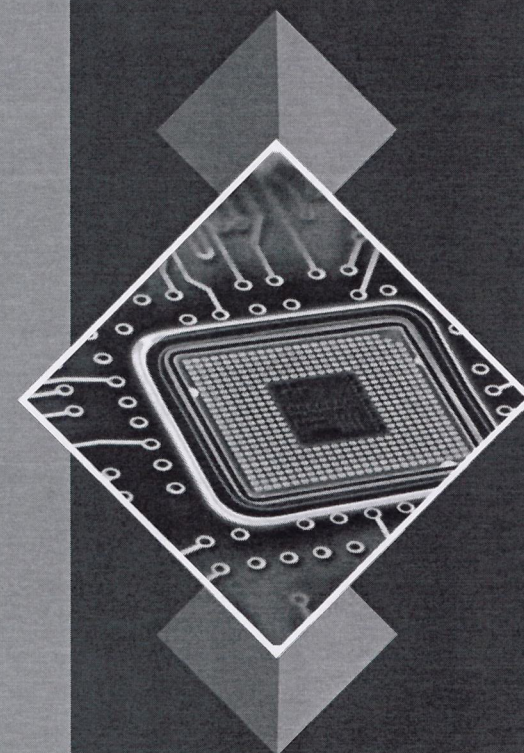
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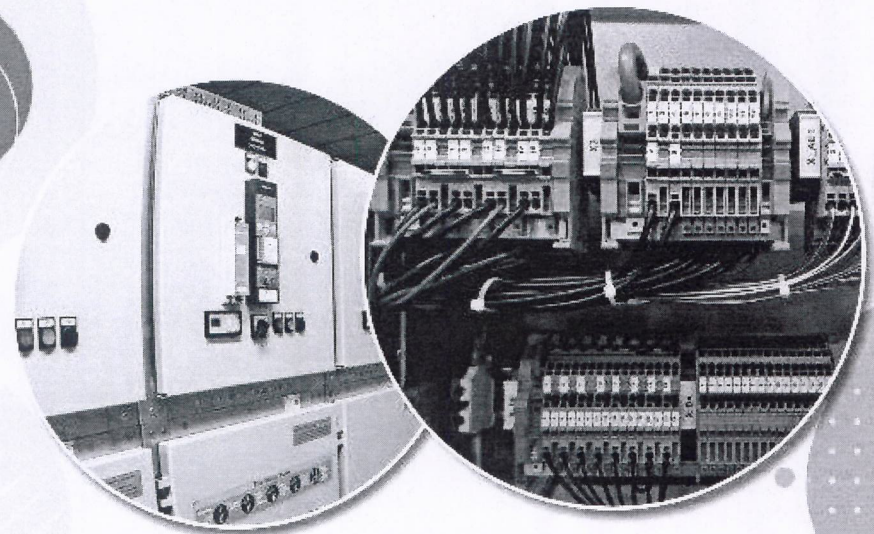
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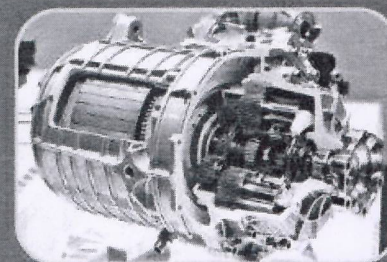
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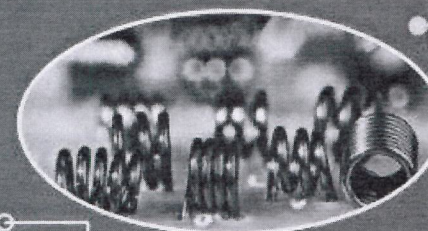
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POWER ELECTRONICS



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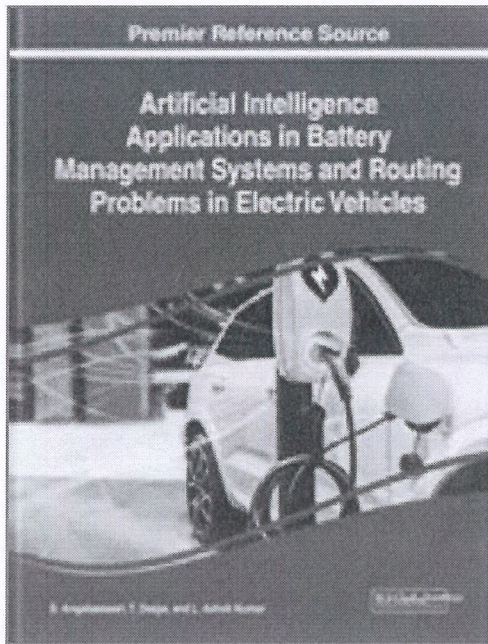
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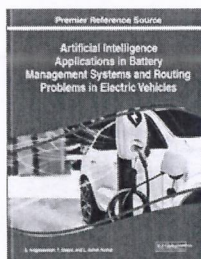
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In today's modern society, to reduce the carbon dioxide gas emission from motor vehicles and to save mother nature, electric vehicles are becoming more practical. As more people begin to see the benefits of this technology, further study on the challenges and best practices is required.

Artificial Intelligence Applications in Battery Management Systems and Routing Problems in Electric Vehicles focuses on the integration of renewable energy sources with the existing grid, introduces a power exchange scenario in the prevailing power market, considers the use of the electric vehicle market for creating cleaner and transformative energy, and optimizes the control variables with artificial intelligence techniques. Covering key topics such as artificial intelligence, smart grids, and sustainable development, this premier reference source is ideal for government officials, industry professionals, policymakers, researchers, scholars, practitioners, academicians, instructors, and students.

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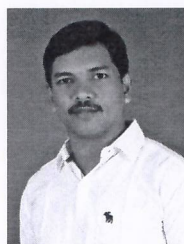
Ionic Mass Transfer



Kommana Siva Kumar

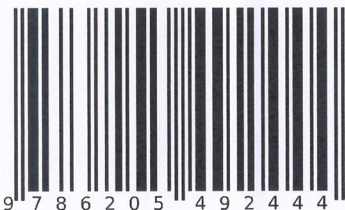
Ionic Mass Transfer

Ionic Mass And Momentum Transfer With Coaxially
Placed Harrow Disc Assembly As Turbulence
Promoter In Circular Conduit



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PREFACE

The book comprises the research work carried out by me in *Electrochemical Engineering Research Laboratory* of the Department of Chemical Engineering, Andhra University College of Engineering (A), Andhra University, Visakhapatnam. The work is original and has not been submitted in part or full for any degree or diploma of any other University.

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Application of Taguchi Technique to Study the Influence of Process Parameters of Ultrasonicator-Assisted Stir Casting on Tensile Strength of Al6061/Nano Rice Husk Ash Composites

[Subrahmanyam Vasamsetti](#), [Lingaraju Dumpala](#) & [V. V. Subbarao](#)

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Nano rice husk ash particles were prepared from completely combusted rice husk by ball milling. These particles were successfully reinforced in Al6061 metal matrix through ultrasonicator-assisted

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Innovations in Mechanical Engineering, pp 821–828

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Effect of Nano-rice Husk Ash Reinforcement on the Hardness of Al6061 Using Taguchi Method

[Subrahmanyam Vasamsetti](#), [Lingaraju Dumpala](#) & [V. V. Subbarao](#)

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Abstract

Metal matrix composites are getting much attraction in the automobile, aeronautical, and aerospace applications. Researchers are focusing on organic reinforcement materials such as red mud and fly ash. Rice husk ash is an industrial waste and has least applications. Surprisingly, it possess very rich silica content. The hardest metallic structures can be developed by reinforcing it with metals. In this research work, it is intended to develop

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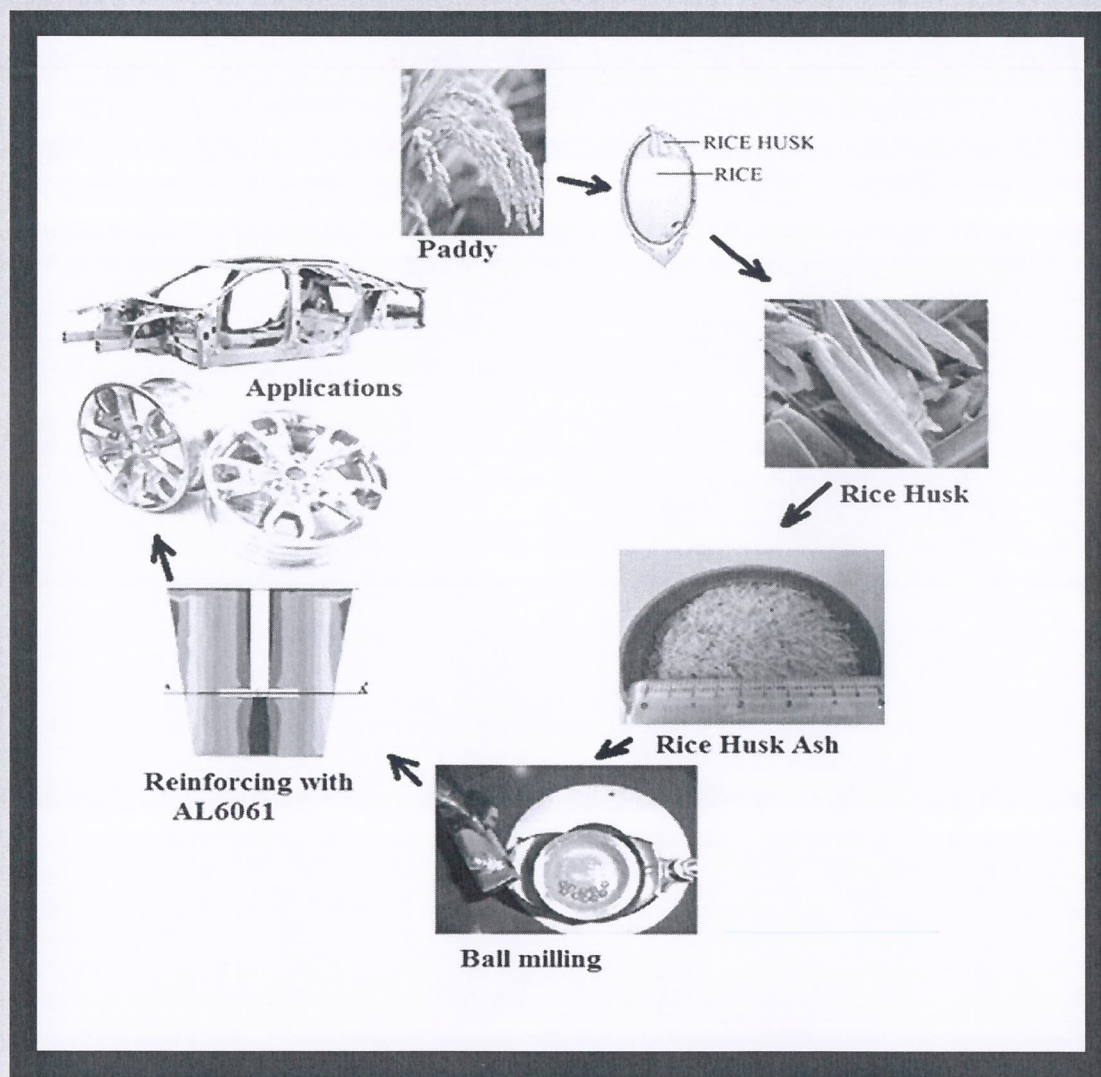
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Dr. Subrahmanyam Vasamsetti
Dr. Lingaraju Dumpala
Dr. V.V. Subba Rao

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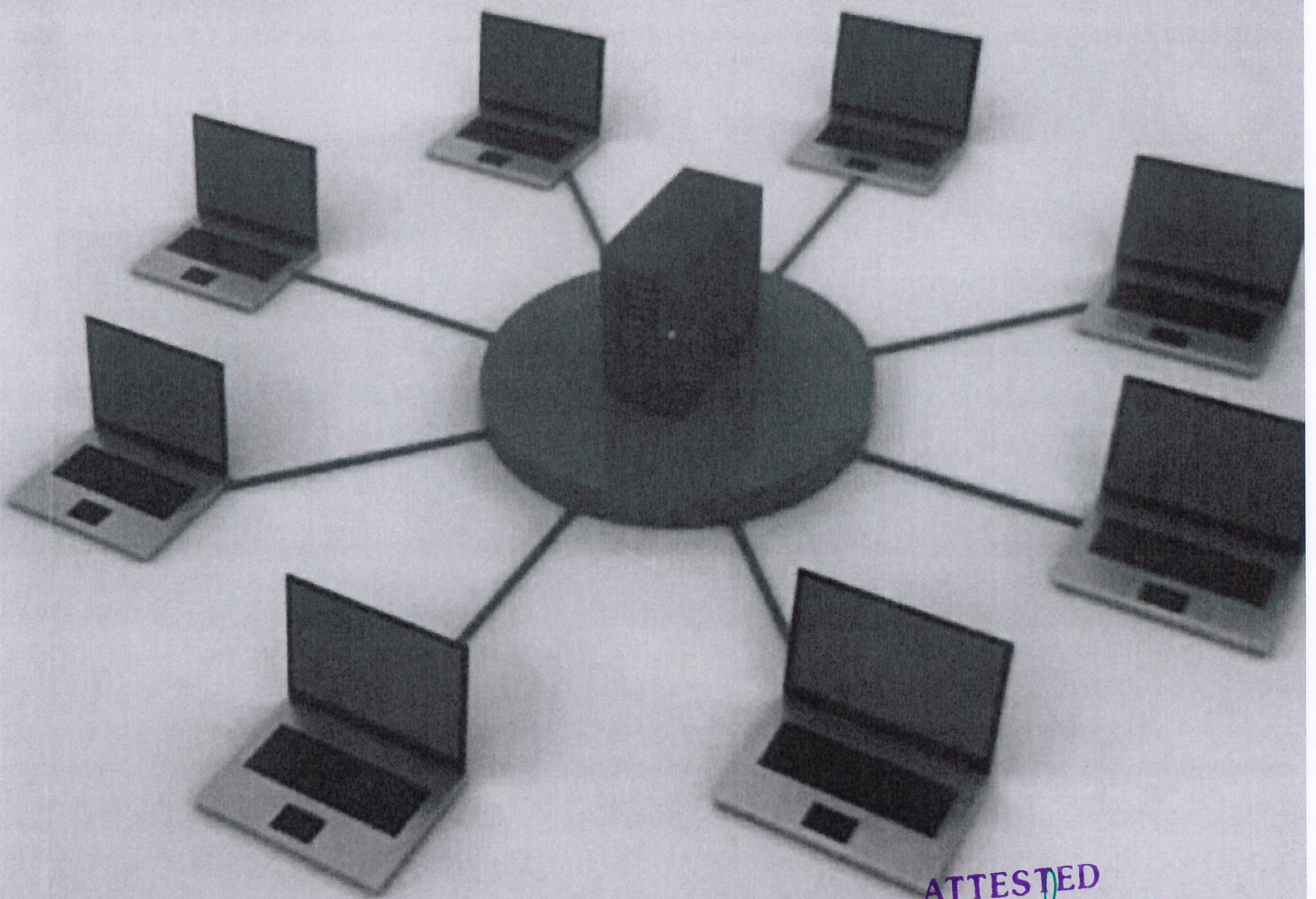
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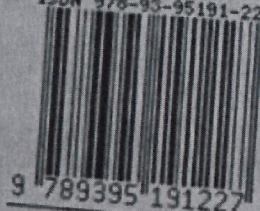
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