Proceedings ICA<sup>2</sup>M<sup>2</sup>TES 2.0 – Dec 2024





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Proceedings

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**INSPIRE** Second International Conference and Awards on Arts, Management, Medical, Technology, Engineering and Science

Proceedings

ICA<sup>2</sup>M<sup>2</sup>TES 2.0 – December 2024

Organised by

# **Inspire Softech Solutions**

Chennai – 600059.

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Compiled by: Dr. Karthiya Banu, Ph.D., Convenor

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# About the organisation

**Inspire Softech Solutions,** A TN Govt Registered & ISO 9001-2015 Certified & AICTE associated Organization, has highly qualified professionals trained in latest cutting-edge technology to train and support, Corporate, universities, colleges, schools, and government departments, to enhance individual skills for better performance. Our commitment and sincerity in defining what learning can be, is what sets us apart.

At present, INSPIRE spreads its wings to Software Development, Research and Development, Book Publishing, BPO and recruitment Services. Moreover, providing Internship and projects for UG & PG students of various domains.

	ISS at a Glance
Type of Organization	Proprietary
Years of experience	17 Years (Established in 2007)
Geographical location	Tamil Nadu, Karnataka, Maharashtra, Kerala, Puducherry.
No of people empowered	More than 2 Lac
Placement	70 - 90% Plus
Clients	School, College, University Students & Teachers, People in Corporate, Government, Public & Private Sector

OUR AICTE CORPORATE ID : CORPORATE61b87f72e161b1639481202

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About the Conference

The Second International Conference and Awards on Arts, Management, Medical, Technology, Engineering, and Science (ICA2M2TES 2.0) served as an esteemed platform for academics, researchers, industry professionals, and students worldwide to exchange ideas and showcase their research contributions. Held on December 6, 2024, at Hotel Ramada, Egmore, Chennai, Tamil Nadu, India, this hybrid-mode conference welcomed both in-person and virtual participants.

The primary goal of ICA<sup>2</sup>M<sup>2</sup>TES 2.0 was to foster knowledge sharing and collaboration, allowing participants to interact with peers and global experts across various disciplines. The event also facilitated opportunities to build professional networks, establish research partnerships, and explore future collaborative ventures. Outstanding individuals were recognized with special awards for their achievements in diverse domains.

The conference featured a series of insightful keynote lectures and presentations by prominent speakers from around the world. Best Paper Awards were presented to authors whose research demonstrated exceptional quality and made significant contributions to their respective fields. This enriching event provided participants with a valuable platform for intellectual growth and professional advancement.

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# MESSAGE FROM FOUNDER & CEO

Dr. Karthiya Banu, Ph.D., Founder & CEO, Inspire Softech Solutions,



Chennai.

It is with great pride and joy that I extend my message for the Second International Conference and Awards on Arts, Management, Medical, Technology, Engineering, and Science (ICA<sup>2</sup>M<sup>2</sup>TES 2.0).

This conference aims to foster knowledge sharing and innovation in this dynamic digital era. By creating a platform for exchanging ideas and discussing the latest technological advancements, we have provided an exceptional opportunity for participants to expand their expertise and explore novel concepts.

I sincerely thank all the attendees, speakers, and contributors for making this event a success. A special note of gratitude goes to the **Inspire Team** for their dedication and effort in organizing such a remarkable event.

Wishing the conference team continued success and looking forward to even greater achievements in the future!

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# Dr. P. VARALAKSHMI

Professor - Department of Information Science and Technology, Director - Centre for Artificial Intelligence & Data Science Research and Applications CEG Campus, Anna University, Chennai



It brings me immense joy to contribute to the **Second International Conference and Awards (ICA<sup>2</sup>M<sup>2</sup>TES 2.0)**. This event exemplifies the spirit of learning and collaboration by providing a dynamic platform to discuss cutting-edge research and emerging trends. It creates opportunities for professionals to connect, innovate, and inspire one another.

I deeply appreciate the hard work of the organizing team and the invaluable contributions of every participant. Your efforts are the cornerstone of this event's success.

Best wishes for a fruitful and impactful conference that leaves a lasting impression on all who attend!

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# Shri. K. KARUNAGARAN

Executive Engineer, HOTLINES, TANTRANSCO, Vellore



I am delighted to extend my warm wishes to the **Second International Conference and Awards (IC<sup>A2</sup>M<sup>2</sup>TES 2.0)**. This prestigious event brings together experts and learners from diverse fields to share their expertise and spark meaningful discussions. The conference reflects the evolving nature of knowledge-sharing in today's interconnected world.

I wholeheartedly thank all the attendees, presenters, and organizers for their dedication and hard work in making this event possible. Special appreciation goes to the Inspire Team for curating such an enriching experience.

Wishing the conference all the success it deserves!

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Dr. C. SUNDAR

Professor & Dean, Faculty of Management, SRM Institute of Science and Technology, Ramapuram Campus, Chennai



It is an honour to be part of the **Second International Conference and Awards (ICA<sup>2</sup>M<sup>2</sup>TES 2.0)**. The interdisciplinary nature of this conference fosters the exchange of innovative ideas and the exploration of solutions to global challenges. It serves as a powerful reminder of the potential we unlock when we work together across diverse domains.

My heartfelt thanks to the organizing committee, especially the Inspire Team, for their meticulous planning and unwavering dedication. To all participants, your contributions make this event truly exceptional.

Wishing everyone a transformative and rewarding experience during this conference!

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Shri. N. VISWANATHAN

Technical Lead, SYENSQO - BELGIAN MNC, BRUSSELS, BELGIUM



The Second International Conference and Awards (ICA<sup>2</sup>M<sup>2</sup>TES 2.0) is a testament to the power of collaboration and innovation. It is a privilege to witness such a platform where professionals, researchers, and learners come together to share insights and advance the frontiers of knowledge.

I commend the Inspire Team for their dedication to organizing this prestigious event and thank all the participants for their active involvement and contributions. Your efforts are a source of inspiration for us all.

May this conference achieve its objectives and leave a lasting impact on the academic and professional community!

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# CA ANANDA

Managing Director, Dhara Human Resource Solutions Pvt Ltd., Chennai



It gives me great pleasure to be part of the **Second International Conference and Awards (ICA<sup>2</sup>M<sup>2</sup>TES 2.0).** This conference is a unique opportunity to bring together thought leaders, researchers, and professionals from diverse fields to share ideas, inspire innovation, and foster collaboration.

Events like these remind us of the importance of knowledge-sharing in driving progress and building a brighter future. I extend my heartfelt gratitude to all participants for their contributions and to the Inspire Team for organizing such a visionary event.

Wishing the conference tremendous success and hoping it sets a benchmark for many more to come!

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2<sup>nd</sup> International Conference and Awards on Arts, Management, Medical, Technology, Engineering and Science

# ICA<sup>2</sup>M<sup>2</sup>TES 2.0 - HYBRID

# **CONFERENCE AGENDA**



Dr. R. KARTHIYA BANU Founder & CEO, Inspire Softech Solutions, Chennai Convenor



Dr. C. SUNDAR Professor & Dean, Faculty of Management, RM Institute of Science and Technology, Ramapuram Campus, Chennai Guest of Honor



Date: O6<sup>th</sup> December 2024



Dr. P.VARALAKSHMI Professor - Department of Information Science and Technology, Director - Centre for Artificial Intelligence & Data Science Research and Applications CEG Campus, Anna University, Chennai Will Inaugurate



Shri. N. VISWANATHAN Technical Lead, SYENSQO - BELGIAN MNC, BRUSSELS, BELGIUM Keynote Speaker



Shri. K. KARUNAGARAN Executive Engineer,

HOTLINES, TANTRANSCO, Vellore Presidential Address



CA ANANDA C. Managing Director, Dhara Human Resource Solutions Pvt Ltd., Chennai Keynote Speaker

Venu

<mark>Venue:</mark> Hotel Ramada by Wyndham, Gandhi Irwin Road, Chennai - 600008.

Time: 10:00 AM onwards

# Proceedings

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Time	Session Title	Speaker/Presenter
10:00 AM	Invocation	
10:05 AM - 10:10AM	Welcome Speech	<b>Dr. KARTHIYA BANU</b> , Founder & CEO, Inspire Softech Solutions, Chennai. Convenor- ICA2M2TES 2.0
10:10 AM - 10:15 AM	Lighting of the Lamp Ceremony	Chief Guest and Conference Chair
10:15 AM – 10:20 AM	Ηοπου	ring Dignitaries
10:20 AM - 10:25 AM	Journey of INSPIRE-Video Presentation	AV
10:25AM - 10:40 AM	Recent Innovations in Electrical	Shri. K. KARUNAGARAN,
	and Electronics Engineering	Executive Engineer
	Presidential Address	HOTLINES, TANTRANSCO, Vellore.
10:40 AM - 11:00 AM	The Age of Intelligence: How Al	Dr. P. VARALAKSHMI,
	Will Shape Humanity's Next Era Inagural Address	Professor -Department of Information Science and Technology
		Director -Centre for Artificial Intelligence & Data Science Research and Applications Anna University, Chennai.
11:00 AM – 11:15AM	Tea Break	
11:15 AM – 11:30AM	The Role of AI in Modern Management Guest of Honour	Dr. C. SUNDAR, Professor & Dean, Faculty of Management, SRM Institute of Science and Technology, Ramapuram Campus, Chennai.
11:30 AM - 12:00PM	Award Ceremony	
12:00 PM – 12:15 PM	Emerging Trends in Audit Technology: Blockchain and AI in Auditing	CA ANANDA,
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	Keynote Address	Managing Director ,Dhara Human Resource Solutions Pvt Ltd.,
12:15PM – 01:15 PM	Technical Paper Presentation	
Technical Session Chair	Shri. N. VISWANATHAN, Technical Lead, SYENSQO - BELGIAN MNC, BRUSSELS, BELGIUM. Dr. S. UMARANI, Professor - Department of Computer Science and Applications SRMIST Ramapuram Campus, Chennai.	<ul> <li>Dr. A. ANTONY PRAKASH,</li> <li>Assistant professor &amp; Information Technology St. Josephs college Trichy.</li> <li>Dr. SHANMUGA PRIYA K,</li> <li>Associate Professor, Sri Lalithambigai Medical College and hospital, Dr MGR Educational and Research Institute, Chennai.</li> <li>Dr. UDHAYAKUMAR P,</li> <li>Professor &amp; Head - Mechanical Engineering,</li> <li>Training and Placement Officer,</li> <li>K.L.N. College of Engineering,</li> <li>Pottapalayam-630612, Sivagangai.</li> </ul>
01:15 PM – 01:20 PM	Spreading Cheer: Surprises to Light Up the Day"	
01:25 PM – 01:30 PM	Vote of Thanks	Mr. ARAVIND, Co-Convenor
01:30 PM - 02:30 PM	Buffet Lunch	_1
06:30 PM – 09:00 PM	Virtual Technical Session & Paper Presentation- Google Meet	
9:00 PM	Closing Remarks	

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		Mr. T. BALAMURUGAN
		Embracing Digital innovations to Enhance Service quality in
		multispecialty Hospitals: A study of Tiruvannamalai district.
		Mrs. BISAN A A ALZAANIN
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		Jordanian SMEs
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	.0	Co (II) & Zn (II) complexes of 3-phenoxy benzaldehyde
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	i.	Implementation and Evaluation of a Voice Smart Care (VSC)
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		Calorie Estimation: A Comprehensive Literature Review
2.		Dr. SHESHANG DEGADWALA (Keynote Address)
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	Exploring the Dynamics of Employee Satisfaction: Key Drivers,
	Measurement Techniques, and Its Impact on Organizational
	Success
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	The Role of IoT in Transforming Modern Healthcare
3.	Dr. VENKATESWARLUK (Keynote Address)
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	Challenges
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	es	Deployment: Utilizing GPS, GIS, and Data Analytics for Optimal
	l	Connectivity and Implementing the Shortest Path Algorithm
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	L C	Multidisciplinary tool for Food-Physics
	e	Ms. RESHMA G V
		Medical Image Processing For Lung Cancer using Machine
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# AI-Enhanced Medical Records Management: Integrating CDC ICD Coding and Global Treatment Recommendations

Bhuvanesh Mohankumar<sup>1</sup>, Ipsita Sethi<sup>2</sup>

Architect, Information Technology Virtusa Corporation Florida, United States of America

Senior Associate, Information Technology Cognizant Florida, United States of America Bhuvanesh Mohankumar <u>bhuvanesh.mohankumar@gmail.com</u>

#### ABSTRACT

The exponential growth of healthcare data presents an urgent need for intelligent systems capable of transforming raw medical records into actionable insights. This paper introduces an AI-powered system that leverages machine learning (ML) to automate and enhance medical record management. By analysing patient histories, doctors' inputs, and diagnostic data, the system generates comprehensive medical records enriched with appropriate CDC International Classification of Diseases (ICD) codes. The system extends its utility by recommending free or alternative treatments available worldwide, thus addressing barriers to care for underserved populations. At its core, the model incorporates natural language processing (NLP) to process unstructured data, classification algorithms to map patient conditions to ICD codes, and a recommendation engine for global treatment options. This solution not only reduces administrative overhead for healthcare providers but also democratizes access to life-saving treatments, paving the way for improved healthcare equity. Results from prototype testing demonstrate high accuracy in ICD code assignment and actionable treatment recommendations, with real-world use cases highlighting its potential to save lives and reduce healthcare disparities. The proposed system exemplifies the convergence of AI and global health, making a compelling case for its adoption in modern healthcare ecosystems.

# Keywords Medical records, AI in healthcare, CDC ICD codes, machine learning, global health equity, treatment recommendation systems.

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# Smart Roads Ahead: Real-Time Pothole Detection with Edge AI and YOLOv8

<sup>1</sup>Karthik Rajan S,<sup>1</sup> Dr.J. Deepa, <sup>1</sup>Mrs.R.Fatima Vincy, Parithii Murugesan<sup>2</sup>, Muthukumaran R<sup>3</sup>

<sup>1,2,3</sup>, Student, Department of Computer Science and Engineering, Easwari Engineering College, Ramapuram, Chennai

<sup>1</sup>Associate Professor, Department of Computer Science and Engineering, Easwari Engineering College, Ramapuram, Chennai

<sup>1</sup>Assistant Professor, Department of Computer Science and Engineering, Easwari Engineering College, Ramapuram, Chennai

<sup>1</sup>karthikrajan025@gmail.com

#### ABSTRACT

Potholes and other pavement anomalies significantly impact urban infrastructure, leading to vehicle damage, traffic disruptions, and accidents. Traditional road inspection methods are labor-intensive, slow, and lack real-time capabilities, underscoring the need for automated, responsive solutions. This study introduces a cutting-edge real-time pothole detection system that leverages deep learning and edge computing to overcome these challenges. By deploying YOLOv8 and MobileNet SSDv2 models optimized for edge devices like NVIDIA Jetson and Raspberry Pi, the system ensures high-speed, accurate pothole detection at the source. This approach minimizes latency by processing data directly on the edge, reducing reliance on cloud infrastructure. A mobile application integrated with the edge devices provides instant notifications and pothole location mapping, enabling rapid response by drivers and maintenance teams. Extensive experiments demonstrate detection accuracies exceeding 90% and processing speeds of up to 30 frames per second under varied road and lighting conditions. The system was tested using a comprehensive dataset of pothole images and real-time video captured from moving vehicles. This research underscores the transformative potential of deep learning-powered edge computing in road maintenance, offering a scalable, efficient, and proactive solution for modern urban challenges. Future enhancements, including GPSintegrated mapping and expanded defect detection, promise to extend the system's capabilities, establishing it as a cornerstone of intelligent and safer transportation infrastructure.

# Keywords: Convolutional Neural Networks (CNNs), YOLO, Dense Net, Pothole Detection, Deep Learning, Raspberry Pi, Edge computing

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# Lean and Six-Sigma Principles for Green Building Development ( partition wall in a toilet)

M.Narayanan<sup>1</sup>, G.Yogapriya<sup>2</sup>

<sup>1</sup> Assistant Professor, SRM School of Environment Architecture and Design, SRMIST, Ramapuram, Chennai.
<sup>2</sup> Associate Professor, Chettinad School of Architecture, Chettinad Academy of Research and Education, Kelambakkam.
\*Corresponding Author: <a href="mailto:narayanm1@srmist.edu.in">narayanm1@srmist.edu.in</a>

#### ABSTRACT

In the construction industry, around 5% wastage in materials is incurred during exterior construction. The figure is appalling at 20% in case of interior works. Material waste increases process time and deteriorates quality, all of which affects the environment. Though green buildings reduce environmental impact, companies hesitate to adopt green due to higher estimated costs. After careful study, this work is able to attribute most of the additional costs to poor planning. This paper addresses that using Lean and Six-Sigma principles can save time, cost, and materials in green building construction. By implementing it in a toilet interior construction, significant savings were achieved throughout various processes and a case method of 17.09% savings in material utilization for partitions wall has been verified and an overall 5-7% reduction in environmental impact. Extending this framework to entire buildings can be conducive to never-seen-before environmental conservation.

# Keywords:Construction industry, green building, Interior design, Lean and six sigma principles.

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# Geospatial Analysis for Wired Network Infrastructure Deployment: Utilizing GPS, GIS, and Data Analytics for Optimal Connectivity and Implementing the Shortest Path Algorithm

<sup>1</sup> Mrs. S Sindhu, <sup>2</sup>Mrs. J.Shyamaladevi

<sup>1</sup>Assistant Professor, Department of Computer Applications, SRM Institute of Science and Technology, Ramapuram, <u>sindhus1@srmist.edu.in</u>, <u>https://orcid.org/0000-0002-2133-6377</u>, Scopus ID: 57403493300

<sup>2</sup> Assistant professor, Department of computer science and business systems, Rajalakshmi Institute of Technology, kuthambakkam.

#### ABSTRACT

This proposed framework outlines a extensive approach for evaluating signal connectivity in urban settings by integrating Global Positioning System (GPS) data, Geographic Information System (GIS) mapping, and advanced analytical algorithms. The main goal is to assess user connection statuses by examining signal strength and interference factors to enhance signal transmission quality. The process starts with collecting user location data, using both manual input and automated GPS acquisition to ensure accuracy. A detailed database of nearby signal transmitting points is then compiled, including geographical coordinates and technical specifications, which are visualized using GIS tools. By utilizing shortest path algorithms such as Dijkstra's and A\*, the framework calculates efficient routes from users to the nearest transmitters, accounting for obstacles like buildings and terrain. Interference assessments take into consideration the heights and materials of surrounding structures, employing 3D modeling to identify potential signal disruptions. Signal strength evaluations involve predicting coverage areas based on transmitter specifications and creating heat maps to illustrate varying signal strengths.

# Keyword: Shortest path algorithm, signal strength, Dijkstra's algorithm, A\* algorithm, GPS, GIS

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ICA<sup>2</sup>M<sup>2</sup>TES 2.0 – December 2024

## Implementation and Evaluation of a Voice Smart Care (VSC) System in Hospital Wards Using the Technology Acceptance Model (TAM) Madhan Mohanraj<sup>1</sup>, Rani Ram<sup>2</sup>

<sup>1,2</sup>Architect, Information Technology,ENT Matrix Corporation,MaryLand, United States of America

#### ABSTRACT

The integration of the Internet of Things (IoT) into healthcare has driven the evolution of smart hospitals, offering innovative solutions to address the increasing demand for human resources, especially in aging societies. This study focused on the development and implementation of a Voice Smart Care (VSC) system in hospital wards and assessed patient acceptance through the Technology Acceptance Model (TAM). To achieve this, a structured questionnaire aligned with the TAM framework was meticulously designed and validated as the primary research instrument. Patients admitted to VSC-enabled wards who had utilized the system for more than two days were invited to participate in the survey. The collected data were analyzed using SPSS version 24.0. From the initial dataset, 30 valid responses were retained after excluding two incomplete submissions. The reliability of the study constructs was confirmed, with Cronbach's a values exceeding 0.84 across all variables. The findings provide critical insights into the application of IoT in healthcare, emphasizing the importance of patient-centered system design to ensure user satisfaction and acceptance. The analysis revealed statistically significant relationships (p < .01) among key factors: perceived ease of use influenced perceived usefulness, perceived usefulness impacted user satisfaction and attitude toward usage, and attitude toward usage shaped behavioral intention to use. The VSC system was successfully developed and implemented in a Taiwanese academic medical center. The findings emphasize that perceived usefulness is a pivotal determinant, underscoring the need for system functionalities that align closely with patients' needs. Furthermore, intuitive system design plays a critical role, as perceived ease of use significantly enhances perceived usefulness. These insights provide valuable guidance for hospitals considering the deployment of similar systems in their wards.

# Keyword:Voice smart care,Technology Acceptance Model, Internet of Things,Smart Hospital,Integrated AI

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## A DEEP LEARNING APPROACH TO POTATO PLANT DISEASES IDENTIFICATION

Pavithra V<sup>1</sup>, Ayisha Afiya A<sup>2</sup>, Shahira<sup>3</sup>

Assistant Professor <sup>1</sup>,Student <sup>2,3</sup>

Department of Computer Science And Applications(BCA) SRM Institute of Science and Technology Ramapuram Chennai EMAIL: pavithrv1@srmsit.edu.in <sup>1</sup> aa8942@srmist.edu.in <sup>2</sup>

#### ABSTRACT

Potato diseases, especially Early Blight and Late Blight, are said to cause a staggering economic loss of about \$210 million, with an additional recurrent \$77 million spent yearly on chemical control measures. According to the aim of this project, farmers' livelihoods can change for the better if appropriate technologies are developed for potato plant disease detection. The study incorporates medium quality digital photographs of potato leaves of various stages. Uploading pictures in real-time as well as effective image wrangling is accomplished by Wight through the use of Tensor Flow. Three data partitions are correctly defined: a training set 80%, a testing set 10%, and a validation set 10%. The Sequential CNN model is used, which due to its layers for data augmentation, scaling, normalizing can scale to different input sizes. The basic architecture of the model consists of Conv2D, MaxPooling2D, Flatten followed by a Dense layer with Softmax activation function. The structure of the Adam optimizer works properly for better model performance, Loss or accuracy can be illustrated by metrics with Sparse Categorical Cross Entropy. An essential aspect of this work is how to integrate such an advanced model into easy to use interface, allowing people to take and send pictures of potato leaves to the system for disease diagnosis. A remarkable 96% accuracy rate puts it well-ahead of the other methods. Such a model, in practical terms, can bring encouragement to the farmers as its interface has ease of use. Hence, the farmers can paddy out with bounty.

#### Keywords: Plant Disease, Deep Learning, CNN, CONV 2D

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# Enhancing Course Outcomes Through NLP-Based Sentiment Analysis and Feedback Reinforcement using Language Linguistic Model

<sup>1</sup>Mr K.Deepanchakkaravarthy,<sup>2</sup>DrS.Umarani

Research Scholar ,Department of Computer Science,SRMIST,Ramapuram

Professor, Department of Computer Science and Applications(BCA), SRMIST, Ramapuram

\*\*Corresponding Author: dk7674@srmist.edu.in, umaranis@srmist.edu.in

#### ABSTRACT

This study leverages Natural Language Processing (NLP) to evaluate student feedback discussions regarding a specific course. The primary goal is to extract subjective scores and classify sentiments expressed in these conversations. Through a step-by-step sentiment analysis, the study identifies and categorizes various emotions using a multiclass labeling strategy to gain deeper insights into students' perspectives. A significant focus of this research is to explore the hypothesis that students' course performance is influenced by the feedback they provide. The analysis considers both positive and negative feedback, with a deliberate focus on using reinforcement techniques to diminish the impact of negative sentiments. This is achieved by applying an advanced Language Linguistic Model, which not only highlights areas for improvement but also emphasizes positive remarks, thus fostering a constructive feedback loop. This study offers a structured framework for interpreting student feedback, providing actionable insights to improve the learning experience. It underscores the importance of systematically analyzing feedback rather than relying on unstructured or subjective evaluations. By utilizing sentiment analysis and NLP approaches, the research shifts the paradigm of educational change from being unproductive or haphazard to being systematic, data-driven, and evidence-based.Moreover, the findings emphasize the transformative role of student feedback in refining course design and teaching methodologies. The research identifies practical ways to modify and enhance the educational experience by addressing student concerns while reinforcing strengths. This underscores the critical value of student feedback as a tool not only for assessing performance but also for driving continuous improvement in educational practices.

# Keywords:Natural Language Processing (NLP), sentiment classifications, Multiclass labelling strategy, Model evidence-based approach and sentiment analysis, reinforcement focus and Language Linguistic

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# FINANCIAL PERFORMANCE OF NLC INDIA LIMITED USING DUPONT ANALYSIS

<sup>1</sup>Dr.K.Priya, <sup>2</sup>Dr.B.Prem Kumar

<sup>1</sup>Associate Professor, Faculty of Management ,SRM Institute of Science & Technology, Ramapuram , Chennai-89
<sup>2</sup>Associate Professor, Faculty of Management ,SRM Institute of Science & Technology, Kattankulathur -603203
\*\*Corresponding author e-mail Id :priyak1@srmist.edu.in

#### ABSTRACT

This study provides a detailed analysis of the financial performance of Neyveli Lignite Corporation India Limited (NLCIL), a central public sector undertaking in the mining and power generation sector. Understanding NLCIL's financial health is crucial for making informed strategic decisions, enhancing investor confidence, and informing policymakers. The study aims to assess NLCIL's profitability, liquidity, solvency, and efficiency, as well as its ability to manage risks effectively. It involves a comparative analysis with industry peers, historical trend analysis, assessment of financial risks, and forecasting future performance. Thae study contributes to academic research by providing empirical evidence and insights into financial analysis in the energy sector context. Through strategic recommendations, the study aims to improve NLCIL's financial performance, optimize capital structure, enhance operational efficiency, and maximize shareholder value.

#### Keywords: Financial Performance, NLC India Limited (NLCIL), Financial Risks

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# Analyzing Atmospheric Patterns for Visibility Prediction with Machine Learning

<sup>1</sup>Dr Nithya .S , <sup>2</sup>Dr. V. Nisha

<sup>1,2</sup>Assistant Professor ,Department of Computer Applications, Faculty of Science and Humanities, SRMIST, Kattankulathur, Chennai, TamilNadu, India.
<u>\*nithyas7@srmist.edu.in</u>, nishav@srmist.edu.in

#### ABSTRACT

Accurately predicting visibility distance based on climatic factors is essential for enhancing safety and operational efficiency in transportation, aviation, and environmental monitoring. In order to assist meteorologists and environmental scientists in forecasting visibility conditions across diverse geographical regions, this study introduces the Climate Visibility Prediction System, a data-driven approach. The system integrates key atmospheric parameters such as particulate matter concentration, humidity, and weather patterns, leveraging data collected from the National Oceanic and Atmospheric Administration (NOAA) and air quality monitors. It computes critical indices, including Air Quality Index (AQI), Relative Humidity (RH), and Visibility Range (VR), and employs machine learning algorithms to analyze atmospheric patterns and predict potential visibility challenges. Key variables in the dataset include dry bulb temperature, wet bulb temperature, dew point, humidity, wind speed, atmospheric pressure, and precipitation. The system's advanced analytical capabilities enable the visualization of long-term visibility trends and the identification of correlations between atmospheric factors, providing insights into the effects of seasonal variations and human activities on visibility. This work underscores the role of machine learning in advancing weather forecasting, contributing to improved decision-making and safety in industries such as aviation, transportation, and environmental monitoring.

Keywords: Visibility Prediction, Weather Forecasting, Machine Learning, Atmospheric Parameters, Visibility Range (VR), Particulate Matter Concentration, Climatic Factors.

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#### Medical Image Processing For Lung Cancer using Machine learning

<sup>1</sup>G.V.Reshma

<sup>1</sup>Assistant Professor Faculty of Science and Humanities,SRM Institute of Science & Technology,

Ramapuram, Chennai-89

#### ABSTRACT

Healthcare is one of the most important sectors, distinct from others due to its critical role in human well-being. People often prioritize healthcare and medical care over cost, reflecting its profound importance. However, in today's world, the identification of diseases remains a significant challenge. With the help of machine learning and deep learning, we can enhance the accuracy and efficiency of disease diagnosis, offering innovative solutions to these challenges. Machine learning focuses on developing algorithms to improve the performance of specific tasks. By analyzing relationships within complex datasets, machine learning can extract valuable insights, even in intricate scenarios. It plays a pivotal role in fields like speech recognition and image recognition, showcasing its versatility and effectiveness. Additionally, data privacy and security are prioritized, ensuring sensitive information remains protected. The ultimate aim of machine learning is to advance technology and drive innovation in cuttingedge research. Deep learning, a subset of machine learning and artificial intelligence, tackles problems that were previously considered impractical. It utilizes large and diverse datasets to deliver significant advancements in image and speech recognition. Deep learning excels in uncovering patterns and insights within data, offering solutions to complex challenges. For research scholars, it serves as a vital tool for addressing critical problems and advancing knowledge.

With the help of machine learning and deep learning, this project focuses on identifying lung diseases using medical image processing. Medical image processing plays a crucial role in diagnosing lung diseases. Advanced techniques, such as deep learning and machine learning, enable efficient image analysis and interpretation. Convolutional Neural Networks (CNNs), in particular, are employed for the automated detection and analysis of lung diseases from radiological images. CNNs are trained to identify patterns associated with conditions like lung cancer and COVID-19, significantly reducing analysis time while improving diagnostic accuracy. The integration of deep learning, machine learning, and CNNs into the medical field holds immense potential. This research demonstrates the effectiveness of advanced techniques in detecting lung diseases and highlights their importance for future advancements. Our future work will focus on improving the model's accuracy, ensuring precise identification of patient problems, and developing enhanced imaging techniques and diagnostic approaches.

# Keywords: Lung cancer detection using Medical Image Processing , Transformer Based Models

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#### **AI Finance Tracker**

<sup>1</sup>Venuchander B, <sup>2</sup>Surya R, <sup>3</sup>Surya K, <sup>4</sup>j Saivijayalakshmi

<sup>1,2,3</sup>Student,Department of Computer Science and Applications(BCA),SRMIST,Ramapuram,Chennai,Tamilnadu <sup>4</sup>Assistant Professor,Department of Computer Science and Applications(BCA),SRMIST,Ramapuram,Chennai,Tamilnadu

#### ABSTRACT

Our AI-driven application simplifies personal finance and investment management by combining advanced analytics, real-time insights, and interactive features to provide a seamless financial experience. It meticulously tracks income and expenses, presenting detailed visualizations to help users identify spending patterns and set budgets. Powered by Gemini AI, the app delivers actionable insights to optimize decisions, while a voice-enabled assistant using Bland AI offers instant, conversational responses to financial queries, making management effortless. For investments, the integration with the Yahoo Stock Market API provides real-time stock market analysis, empowering users to track portfolios, analyze trends, and seize opportunities. By integrating financial tracking, AI-driven insights, voice interaction, and investment analysis, the app transforms financial management into an intuitive process, enabling users to achieve their financial goals efficiently and effectively.

Keywords : Finance Tracker, Generative AI, Twilio Notifications, Interactive Analytics, Bland AI

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# The Role of IoT in Transforming Modern Healthcare

<sup>1</sup>Dr V.Poornima

<sup>1</sup>Associate Professor, Department of Computer Science, Vels Institute of Science Technology and Advanced Studies Chennai, Tamilnadu, India.

poornimasudhaagar@gmail.com

#### ABSTRACT

The integration of Internet of Things (IoT) technologies into the healthcare sector marks a significant evolution, bringing measurable advantages. This paper explores the adoption of IoT in healthcare, with a focus on specific sensor technologies and communication protocols. It highlights successful applications such as remote patient monitoring, personalized treatment plans, and improved healthcare delivery processes. Additionally, it examines the critical challenges that must be addressed to fully harness IoT's potential in healthcare, including data security, interoperability, and effective utilization of IoT-generated insights. By emphasizing the practical benefits of IoT, this paper aims to inspire healthcare professionals and researchers to leverage these technologies to enhance patient outcomes, optimize resource management, and improve overall healthcare efficiency.

Keywords: IOT, Data Driven, smart sensor, Remote patient monitoring, Embedded System

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# Advancements in Machine Learning for Food Classification and Calorie Estimation: A Comprehensive Literature Review

<sup>1</sup>Dr N.Mathimagal, <sup>2</sup>Ms Adyasha Samal, <sup>3</sup>Dr.N.Revathi

<sup>1,2,3</sup>Assistant Professor,Department of Computer Science and Applications(BCA),SRMIST, Ramapuram,Chennai,Tamilnadu

 $Corresponding\ Author: * adyas has @srmist.edu.in, mathiman @srmist.edu.in, revathiphd 3 @gmail.com and the state of the$ 

#### ABSTRACT

In this fast-paced lifestyle, there's a significant rise in the demand for dietary management and food-based applications due to its role in maintaining a healthy style. This leads to a growing necessity for accurate food classification and calories estimations. The traditional methods usually don't provide efficient results when it comes to accurate calories estimation due to the large variety of food types. This paper explores the modern machine learning techniques used for overcoming the challenges in developing a solid framework for food classification and calorie estimation. The system recognizes the food items from images and integrates nutritional records to calculate calories with the help of convolution neural network. There's a high accuracy in identify the food items while significant improvement noticed in calorie estimation when compared to traditional ways. This work has the potential to enhance applications in personal health monitoring, fitness tracking, and the food industry.

Keywords: Dietary Management, Machine Learning, Convolution Neural Network, Tracking

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# The Impact of Leadership Styles on Digital Transformation Adoption: The Moderating Role of Organizational Culture among Jordanian SMEs

Author Name(s): Bisan A A Alzaanin Institution: Jamia Millia Islamia Email: <u>bisanaaref@gmail.com</u>

#### ABSTRACT

This study aims to identify the leadership styles' impact on the adoption of digital transformation, additionally, examining the moderating role of organizational culture among Jordanian SMEs. More specifically, it examines the impact of transformational and transactional leadership styles on digital transformation adoption. Also, it identifies the role of organizational culture as a moderator of this relationship. In order to achieve this target, the study adopted a quantitative research design using a questionnaire to be distributed among SMEs' employees in Jordan. 384 questionnaires were distributed and only 228 questionnaires were returned, however, only 213 ones were accepted for analysis. The findings revealed that leadership styles significantly affect digital transformation in Jordanian SMEs. General leadership, including transformational and transactional leadership, supports digital transformation. Organisational culture moderates the relationship between leadership styles and digital transformation, making transformational and transactional leadership more effective. This study suggests that SMEs use transformational and transactional leadership styles to improve digital transformation. To promote digital transformation and keep up with technology, institutions must pay attention to the role of the organizational culture.

Keywords: Leadership Styles, Digital Transformation, Organizational Culture, Jordanian SMEs

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# Co(II) & Zn(II) Complexes of 3-Phenoxy Benzaldehyde Derivatives: Synthesis, Characterisation And Antimicrobial Evaluation

Raji Sankar <sup>a,\*</sup>, T. M Sharmila <sup>b, a,b</sup>

Department of Chemistry, Noorul Islam Centre for Higher Education, Kumaracoil-629 180, Tamil Nadu, India rajisnkrlal@gmail.com

#### ABSTRACT

Transition metal complexes of Schiff bases are of significant interest in biomedical research due to their structural diversity and therapeutic potential. This study explores the synthesis and characterization of Co(II) and Zn(II) complexes with a Schiff base ligand derived from 2-((3-phenoxybenzylidene)amino)propanoic acid. The complexes were characterized using elemental analysis, mass spectrometry, FT-IR, UV-Vis, NMR spectroscopy, molar conductance, and magnetic susceptibility measurements. The characterization confirmed the formation of stable, non-electrolytic complexes with the stoichiometry  $[M(L_2)] \cdot nH_2O$ , adopting a tetrahedral geometry around the metal centers and coordinated through two oxygen and two nitrogen donor atoms. Biological assays demonstrated that the Co(II) and Zn(II) complexes exhibited significant antimicrobial activity against *Escherichia coli* and *Candida albicans*, with both complexes displaying enhanced efficacy compared to the uncomplexed ligand. These findings highlight the potential of Co(II) and Zn(II) Schiff base complexes as promising candidates for antimicrobial therapeutic development.

**Keywords:**Transition metal complexes, 3-phenoxy benzaldehyde, Amino acids, Antimicrobial

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# INTELLIGENT WEB SCRAPING FOR GeM AND OTHER E-MARKETPLACES: UNLOCKING ENHANCED PRODUCT INSIGHTS

Aseela Thanseem K S, Pathmasri V, Anushiya S Vivekanandha College of Arts and Sciences for Women (Autonomous) <u>aseelathanseem@gmail.com</u> <u>pathmasrisri70@gmail.com</u> <u>anushiyasenthil1105@gmail.com</u> Dr. P. Sumitra

Associate Professor Department of CS & CA Vivekanandha College of Arts and Sciences for Women (Autonomous)

#### ABSTRACT

The product comparison web application is a powerful digital tool designed to simplify the online shopping experience by enabling users to search and compare product information from major ecommerce platforms, including GeM, Amazon, and Flipkart. This application provides a seamless interface for users to input product details such as category and brand name, delivering real-time data on product names, links, pricing, and availability from multiple sources. To achieve its functionality, the application leverages advanced web scraping technologies, including Selenium, BeautifulSoup, and Puppeteer. Selenium facilitates automated interaction with web browsers to extract dynamic content, while BeautifulSoup efficiently parses HTML data for specific product attributes. Additionally, Puppeteer allows for the scraping of JavaScript-rendered content, ensuring comprehensive data collection across various platforms. This project is essential in today's fast-paced e-commerce environment, where consumers often face challenges in finding the best deals and product options. By aggregating information from multiple sites into a single, user-friendly interface, the application empowers users to make informed purchasing decisions with ease. It significantly reduces the time and effort spent on manual searches, thereby enhancing the overall shopping experience. Users gain access to up-to-date pricing information and product availability, all in one place, which fosters smarter buying choices. Ultimately, this product comparison web application serves as a valuable resource for consumers navigating the complexities of online shopping, enabling them to find the best products at the most competitive prices while enhancing their overall shopping efficiency.

Keywords:Web Scraping, Selenium, BeautifulSoup, Flask, E-Commerce Product, Real-Time Data Comparison

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# A Systematic Review of Cryptographic Techniques for Enhancing Security in Wireless Sensor Networks and IoT Devices: Emerging Trends, Challenges, and Future Directions

#### Ms. Libi Kurian

Research Scholar, PG & Research Department of Computer Science and Applications, Vivekanandha College of Arts and Sciences for Women (Autonomous), Elayampalayam, Tamilnadu, India. Email: <u>libi.kurian@yahoo.com</u>

Dr. P. Sumitra Associate Professor Department of CS & CA Vivekanandha College of Arts and Sciences for Women (Autonomous)

#### ABSTRACT

This systematic literature analysis examines cryptographic methods for enhancing the security of Wireless Sensor Networks (WSNs) and Internet of Things (IoT) devices. It categorizes and evaluates Symmetric, Asymmetric, Lightweight, and Hybrid cryptography techniques, focusing on their suitability in resource-constrained environments. The research highlights the trade-offs between security and performance, emphasizing on key metrics such as energy efficiency, cost-effectiveness, latency, and scalability. It also addresses challenges, including computational complexity, interoperability issues, and resilience against emerging threats like quantum computing. The review identifies several emerging themes such as quantum-resistant algorithms, AI-driven optimization, and blockchain integration, while highlighting gaps in standardization and economic feasibility. Synthesizing insights from 40 relevant articles, it provides a comprehensive overview of current practices and future directions. Additionally, the analysis offers actionable recommendations for researchers and policymakers to develop scalable, robust, and efficient cryptographic frameworks tailored to the security demands of IoT and WSN ecosystems.

**Keywords:** Wireless Sensor Networks, IoT, Cryptography, Security, Lightweight Encryption, Blockchain

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# Enhancing Student Academic Performance through Machine Learning-Driven Optimal Teaching Strategy Recommendations

Ms. Varsha Ganesh Research scholar SRM Institute of science and Technology varshasivashanker@gmail.com Dr.S Umarani Professor SRM Institute of Science and Technology ravania@gmail.com

#### ABSTRACT

This study aims to analyze the effectiveness of different teaching methods on student's academic performance and utilize ML algorithms to predict the best Teaching strategy for individual student. The effectiveness of different teaching methods varies between students due to differences in demographics, learning styles, and psychological factors. The study involves 100 students of various social, economic background from XYZ university. Each student undergoes through 5 different teaching methods namely Traditional lecture-based Teaching, Group discussions-based Teaching, Project-based Teaching, Gamified Teaching, One-on-one Teaching and the best teaching method is found out. This information is fed into a Sequential Neural Network model, which is hyperparameter-tuned to predict the best-suited teaching method for a student, achieving an accuracy score of 86%.

# Keywords:Teaching Strategy, Machine Learning, Student Academic Performance, Neural Network, Educational Data Mining

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# 4HAN: Novel Hypergraph-Based Hierarchical Attention Network for Fake News Detection

1<sup>st</sup> Alpana Arun Borse

2<sup>nd</sup> Prof. Dr. Gajanan K. Kharate

Research Scholar, MCERC, Naisk Assistant Professor, PCCOE, Pune alpana.borse@gmail.com Director MCERC, Nasik gkkharate@rediffmail.com

# ABSTRACT

To enhance the authenticity and automatic classification of news, we have developed novel Hypergraph convolution and attention based; 4HAN: 4-level Hierarchical Attention Neural Network. The four levels consist of Paragraphs, Sentences, Words, and a proposed fourth level focusing on the Contextual information- metadata of the news. The 4th level uses Hypergraph-based Attention and Convolution to form a contextual information vector, which is then applied to the news content vector created by word and sentence attention mechanisms. This approach allows the model to prioritize more or less important words and contextual information, thereby improving the news representation. We use the LIAR dataset, which contains short news articles, to demonstrate that this design significantly improves the accuracy of Fake News detection.

Keywords :Attention, Classification, Convolution, Fake News, Hypergraph, Neural Network, Prediction

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#### ICA<sup>2</sup>M<sup>2</sup>TES 2.0 – December 2024

#### **Driving Employee Engagement among Educators**

Ms. Sonia Eapen Research Scholar, Gitam Deemed to be University, Visakhapatnam soniaeapen84@gmail.com Dr.Sk Shamshuddin Associate Professor, Gitam Deemed to be University, Visakhapatnam shamshuddin1234@gmail.com

#### ABSTRACT

Teachers hold a crucial role in shaping the minds of future generations. The New Education Policy highlights the importance of empowering teachers for the betterment of our country's future, granting them the freedom to adopt suitable methods for students' overall development. At this juncture, the self-efficacy, psychological safety, and engagement of teachers demand attention. This study examines how self-efficacy and psychological safety influence the engagement level of teachers in India, and explores how demographic factors like gender, parental status, and work experience affect their engagement. Conducted among 200 teachers in a major Indian city, the survey results, analyzed through path analysis, reveal that psychological safety and self-efficacy boost engagement among female teachers, self-efficacy doesn't have the same impact on male teachers. This study underscores the need for tailored engagement strategies, especially gender-specific ones, to enhance teacher engagement levels.

Keywords: self-efficacy, psychological safety, employee engagement, teaching profession

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# Exploring the Dynamics of Employee Satisfaction: Key Drivers, Measurement Techniques, and Its Impact on Organizational Success

S. SMILEE BOSE<sup>1</sup>, G. HEMALATHA<sup>2</sup> <sup>1</sup>Research Supervisor, Associate Professor, Department of Commerce, St. Peter's Institute of Higher Education and Research St. Peters University, Avadi, Chennai 600 054. Email id : Smilees.commerce@spiher.ac.in

<sup>2</sup>Part time Research Scholar, Department of Commerce, St. Peter's Institute of Higher Education and Research, St. Peters University Avadi, Chennai 600 054. Email id : hemajmurali@gmail.com

#### ABSTRACT

Employee satisfaction is a cornerstone of organizational effectiveness, directly influencing productivity, retention, and workplace culture. This paper delves into the key factors driving employee satisfaction, the tools used to measure it, and its correlation with organizational performance. By analyzing survey data and presenting charts, we highlight actionable strategies to enhance satisfaction. The findings underline the significance of fostering a positive work environment, competitive compensation, and clear growth opportunities. Organizations prioritizing these elements experience higher retention and improved performance, underscoring the criticality of employee satisfaction in achieving long-term success.

Keywords: Employee Satisfaction, Workplace Culture, Organizational Performance, Job Satisfaction, Employee Retention.

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# EMBRACING DIGITAL INNOVATIONS TO ENHANCE SERVICE QUALITY IN MULTI-SPECIALTY HOSPITALS: A STUDY OF TIRUVANNAMALAI DISTRICT

Mr. T. BALAMURUGAN, Ph.D.,(Full Time) Research Scholars - Author 1, Dr. C. DHAYALAN, Assistant Professor of Commerce (Senior Scale) - Author 2, P.G. & Research Department of Commerce, Voorhee College, Vellore – 632 001. E-mail - Id : balatutorial.82@gmail.com, Cell:9751643802, E-mail Id: dhayalan1664@gmail.com, Cell No.9790311197

# ABSTRACT

Background: Digital innovations have transformed the healthcare landscape, offering opportunities to enhance service quality in multi-specialty hospitals.

Objective: This study investigates the impact of digital innovations on service quality, patient satisfaction, and operational efficiency in multi-specialty hospitals in Tiruvannamalai district.

Methods: A mixed-methods approach combined surveys and interviews with hospital administrators, healthcare professionals, and patients.

Results: Digital innovations significantly improved patient satisfaction (85%), operational efficiency (80%), and accessibility (75%). However, infrastructure, training, and data security concerns persisted.

Conclusion: Digital innovations are crucial for enhancing service quality in multi-specialty hospitals. Addressing infrastructure, training, and data security concerns is essential for effective integration.

#### **KEYWORDS:**

Digital Innovations, Multi-Specialty Hospitals, Service Quality, Healthcare Technology, Tiruvannamalai District.

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# GENERATIVE AI AS AN AUTOMATED TEACHER IN REMEDIAL CLASSES: A COMPREHENSIVE OVERVIEW

#### Dr. Kalpana. D

Department of Computer Applications J.H.A. Agarsen College, Madhavaram, Chennai, Tamil Nadu, India kalpana802015@gmail.com

# ABSTRACT

The advent of Generative AI has opened new avenues for educational advancements, particularly in remedial learning. This paper proposes the development of an automated teaching system, referred to as the "AI Tutor," designed specifically to aid students who require additional support in their academic journey. The AI Tutor will utilize sophisticated Generative AI techniques to respond to students' queries, delivering tailored content suitable for varying question formats, including 2-mark, 5-mark, and 10-mark questions. By leveraging natural language processing capabilities, the system will provide accurate and context-rich answers that cater to individual learning needs and styles. The result is a dynamic educational tool that enhances student engagement, promotes active learning, and fosters improved academic performance by ensuring that learners receive prompt and relevant information. This innovative approach aims to bridge gaps in understanding and empower students to achieve their educational goals.

#### **KEYWORDS:**

Generative AI, automated teaching, remedial education, personalized learning, natural language processing, academic support, student engagement, educational innovation.

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# A CASE STUDY ON ZOMATO – TURNAROUND PERSPECTIVE

Dr. Venkateswarlu Karumuri

Assistant Professor Department of Management Studies Madanapalle Institute of Technology and Science Madanapalle Mobile No: +91-9704662676 E Mail: karumuri2007@gmail.com

#### Dr.B. Rajesh Kumar

Assistant Professor Department of Management Studies Madanapalle Institute of Technology and Science Madanapalle Mobile No: +91- 9505823528 E Mail: rajeshasstprofessor@gmail.com

# ABSTRACT

This article explores the transformative journey of Zomato, a leading food delivery and restaurant aggregator platform, through the perspective of a turnaround strategy. Challenged with significant difficulties in business, including tough and intense competition, operational inefficiencies, and shifting consumer preferences, Zomato undertook a strategic shift to reclaim significant market growth and achieve sustainable growth. The study highlights some of the significant key areas of focus of the turnaround are technology-driven solutions, cost cutting through reduction of operations in unsuccessful cities or towns, and expanding into new verticals such as grocery delivery and cloud kitchens. Strategic investments in diversified businesses and introduction of AI and ML for understanding of customers and delivery of service enabled the company to enhance operational efficiency that enabled good customer experience.

#### **KEYWORDS:**

Turnaround strategy, Zomato, food delivery, customer experience, diversification, strategic investments.

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# Lifetime Achievement in Power Sector Award



Shri. K. KARUNAGARAN, M.E., Executive Engineer, HOTLINES, TANTRANSCO, Vellore.

Shri. K. Karunagaran, M.E., is an accomplished Executive Engineer at Tamil Nadu Transmission Corporation (TANTRANSCO), Thiruvalam, with over 32 years of extensive experience in the power sector, specializing in substation and transmission maintenance. As the Head of the Hotline Maintenance Wing for EHV Transmission Lines and Substations across several districts in Tamil Nadu, he introduced innovative techniques, including the "Bare Hand Live Line Maintenance" method, implemented for the first time in the state in 2016. Under his leadership, his team has maintained an exemplary safety record with zero accidents over 14 years, even while operating on live high-voltage circuits. Shri. Karunagaran has pioneered initiatives such as establishing standardized testing for live line maintenance tools at the Central Power Research Institute, introducing condition-monitoring techniques using thermal imaging, and designing specialized vehicles for hotline works. His efforts in modernization include submitting proposals for advanced tools and participating in major restoration efforts, such as post-cyclone Vardha in Chennai. Instrumental in establishing six new hotline sections across Tamil Nadu, he has also been actively involved in technical documentation and policy contributions, reflecting his dedication to infrastructure advancement. In his earlier roles, Shri. Karunagaran contributed to modernizing consumer billing systems under Project BEST, overseeing software and hardware implementation in the Vellore Region. His international experience includes working as a Control Engineer in Muscat and serving as a Contracts Manager in Oman, showcasing his global expertise. Additionally, his technical acumen is certified through specialized training in live-line maintenance and SCADA systems, complemented by his academic qualifications, including a Bachelor's degree in Electrical and Electronics Engineering and a Master's degree in Power Systems. As a guest lecturer and technical trainer, he has shared his expertise with institutions like VIT Vellore, NPTI Bangalore, and various engineering colleges, demonstrating his commitment to education and capacity building in the field. Shri. Karunagaran's career exemplifies a blend of innovation, technical proficiency, and leadership, significantly contributing to the development and reliability of Tamil Nadu's electrical infrastructure.

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# **Excellence in leadership Award**



Dr. C. SUNDAR, Ph.D., Professor & Dean, Faculty of Management, SRM Institute of Science and Technology, Ramapuram Campus, Chennai.

Dr. C. Sundar is a distinguished academic leader with over 25 years of experience in management education, research, and institutional development. His career is marked by strategic roles such as Dean, Vice Principal, and Professor at reputed institutions, where he has demonstrated expertise in strategic planning, accreditation processes, and academic program development. Dr. Sundar has been instrumental in enhancing institutional reputation through initiatives focused on quality education, industry-institute collaboration, and fostering student and faculty development. He has successfully led departments and faculties, introduced innovative academic initiatives, and spearheaded NBA accreditation processes, showcasing his dynamic leadership. A dedicated researcher, Dr. Sundar has supervised five Ph.D. scholars and published 26 research papers in esteemed journals. His research interests include entrepreneurial development and AI-enabled data analytics, supported by grants such as Rs. 3,50,000 from AICTE for an FDP on "AI-Enabled Data Analytics for Business Decision Making" in 2023. Dr. Sundar's accolades include the Lifetime Achievement Award in Education from Lions International in 2024. He has organized impactful events like Management Conclaves, HR Summits, and entrepreneurial programs, strengthening industry linkages and fostering innovation. His visionary initiatives, including the introduction of new courses and significant events like the School Principal Conclave and Decennial Celebrations at SRM IST, highlight his commitment to academic excellence. As a Guest of Honor, Moderator, and Chief Guest at various conferences and events, Dr. Sundar continues to inspire and lead in the field of education.

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# **Innovation in Education Award**



Dr. S. UMARANI, MCA., Ph.D., Professor, Department of Computer Science and Applications, SRMIST Ramapuram Campus, Chennai.

Dr. S. Umarani is a distinguished professor in the Department of Computer Science and Applications (BCA) at SRMIST Ramapuram, known for her dedication to fostering technical and moral education. She has 24 years of experience in teaching and industry. Dr. Umarani has published 32 Scopus-indexed journal articles, 5 patents, and presented 46 papers at national and international conferences. She has received the "Asiriyar Semmal Award" and Best Paper Award. Actively contributing to student and faculty development, she conducts impactful sessions on Human Values and Life Skills, focusing on teamwork, aspirations, and personal growth. Recognized for her initiatives in organizing technical software training and MOOCs, she has been appreciated by IIT Bombay Spoken Tutorial. With a strong focus on research trends and ethical principles, she inspires innovative thinking and holistic development, making her a vital asset to the academic community.

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# **Best Researcher Award**



Dr. R. RAVIKUMAR Ph.D., Associate Professor in Mathematics, St. Joseph's College of Engineering and Technology, Thanjavur – 613 006.

Dr. R. Ravikumar is currently working as an Associate Professor at St. Joseph's College of Engineering and Technology, Thanjavur, with an impressive teaching experience spanning 26 years. He completed his Ph.D. in Mathematics from Anna University, Chennai, in 2016, an M.Phil. from Annamalai University, Chidambaram, in 2008, and an M.Sc. from A.V.C. College, Mayiladuthurai (Bharathidasan University), in 1993. Additionally, he has successfully completed the NPTEL online course on Descriptive Statistics with R Software.

Dr. Ravikumar's areas of specialization include Bi-topological Spaces (7 papers), Graph Theory (3 papers), Fluid Dynamics, Queueing Theory, and collaborative studies with engineering disciplines, alongside a unique contribution in English research. His publication portfolio includes 1 SCI-indexed paper, 7 SCOPUS-indexed papers, and 6 other indexed papers, with one presented at IIT Chennai. He has guided 20 M.Phil. students and contributed extensively to academia by attending various conferences (6), seminars (3), FDPs (9), workshops (8), symposiums (3), and training programs (4).

As a conference coordinator (3 events), seminar organizer (2 events), and resource person for FDPs and conferences (3 sessions), he has played a pivotal role in academic events. Before joining St. Joseph's College, he held teaching positions at institutions such as Arulmigu Meenakshi Amman College of Engineering, Pallavan College of Engineering, Saveetha School of Engineering, and Bharath Institute of Science and Technology.

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# **Best Researcher Award**



Dr. A. ANTONY PRAKASH, M.Sc CS, M.Phil CS, M.Tech CSE, Ph.D., Assistant Professor, Information Technology, St. Joseph's College, Tiruchirappalli – 620 002.

Dr. A. Antony Prakash, an Assistant Professor in the Department of Information Technology at St. Joseph's College, Trichy, is an accomplished academician with extensive teaching and research experience in computer science. He earned his Ph.D. in Computer Science from St. Joseph's College, Trichy, in 2020. His educational journey also includes an M.Tech in Computer Science and Engineering from PRIST University, Trichy, an M.Phil in Computer Science from St. Joseph's College, Trichy, and an M.Sc in Computer Science from Urumu Dhanalakshmi College, Trichy. Over the years, Dr. Prakash has established himself as a dedicated educator with a strong focus on developing curriculum, mentoring students, and advancing research. Dr. Prakash's research expertise spans data security, big data analytics, and performance enhancement in Hadoop environments. He has published 23 international journal articles, presented his work at seminars and workshops, and authored three books along with four book chapters in reputed publications. His significant contributions include research on secure data storage systems, optimization techniques for Hadoop, and machine learning applications for healthcare. Additionally, he is actively involved in framing undergraduate and postgraduate syllabi, enhancing the academic framework of the institution.

Dr. Prakash's professional achievements are complemented by his passion for fostering engaging learning environments. He is a member of the Placement Committee and the Micro Quality Team at the department level, where he actively contributes to student career development and academic quality assurance. A recipient of several certifications, including the "100 Days of Code: The Complete Python Pro Bootcamp for 2023" and "The Complete Web Development Bootcamp 2024," he continuously strives to stay updated with the latest advancements in technology and pedagogy.

With his unwavering commitment to academic excellence, innovative teaching methodologies, and impactful research, Dr. A. Antony Prakash continues to inspire and shape the future of his students and the academic community at large.

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# **Innovation in Education Award**



Dr. J. MAHESWARI Ph.D., Associate Professor, Department of Economics, Quaid - E - Milleth Government College for Women, Chennai- 600 002.

Dr. J. Maheswari is an Associate Professor in the PG and Research Department of Economics at Quaid-e-Millath Government College for Women, Chennai. With extensive teaching experience of 23 years at the undergraduate (UG) level, 15 years at the postgraduate (PG) level, and 3 years guiding M.Phil. students, Dr. Maheswari has supervised numerous M.Phil. and Ph.D. students. Her achievements include participation in multiple orientation and refresher courses, faculty development programs, workshops, seminars, and webinars. Dr. Maheswari has published articles in journals and edited books, and actively contributed as a resource person in various academic roles. She is serving as co-rordinstor, translator and reviewer of Economics Text book tamil trnaslation for Muthamizh Arignar Mozhipeyarppu thittam, Tamilnadu Text Book Corporation She has received multiple awards, including the Best Faculty Award (2020), the Global Eminent Teacher Award (2021), and the Women Educationist Excellence Award (2023). Her contributions also extend to roles such as course writer, coordinator, and reviewer for academic programs and distance education initiatives.

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# **Excellence in Leadership Award**



Dr. G. VENKATA RAMI REDDY, M.Tech. (CSE), Ph.D. (CSE), Professor of CSE, Dean CSE Allied branches, Department of CSE, Vardhaman College of Engineering (Autonomous), Hyderabad, Telangana- 500075.

Dr. G. Venkata Rami Reddy is a highly accomplished academician, researcher, and administrator, serving as Professor of CSE and Dean of CSE Allied Branches at Vardhaman College of Engineering, Hyderabad. With an M.Sc. in Physics, M.Tech. in Computer Science and Engineering, and a Ph.D. in Computer Science and Engineering, his expertise spans over 24 years of teaching and research. He has held key positions at JNTU Hyderabad, including Additional Controller of Examinations, Deputy Director of the Academic Audit Cell, and Director of Admissions.

Dr. Reddy has guided multiple Ph.D. and M.Tech students, published over 100 research papers in reputed journals, and holds three patents in areas like machine learning and deep learning. He is known for innovations such as introducing the Electronic Distribution of Exam Papers (EDEP) system at JNTUH and developing software for EAMCET. He has also contributed to curriculum design, integrating advanced technologies and teaching methodologies to enhance student learning. A recipient of the "Best Teacher of the Year 2024" award, Dr. Reddy continues to excel in academic, research, and administrative leadership.

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# **Best Researcher Award**



. Dr. YELISELA RAJESH, M. Tech (CSE), Ph.D., Assistant Professor, Department of CSE KLEF Deemed to be University, Green Fields, Vaddeswaram, Guntur District, Andhra Pradesh - 522 302.

Dr. Yelisela Rajesh is an accomplished academic and researcher in the field of Computer Science and Engineering with over 13.6 years of teaching experience. He is currently working as an Assistant Professor in the Department of CSE at KLEF Deemed to be University, Vijayawada. He holds a Ph.D. in Computer Science and Engineering from Visvesvaraya Technological University and an M.Tech from K L University. Dr. Rajesh has taught subjects such as Computer Programming, Mobile Application Development, Operating Systems, Artificial Intelligence, and Software Architecture.

His research interests include security systems, deep learning, and neural networks, with several publications in international journals and conferences. He has been awarded prizes for research presentations and certifications such as an Oracle Trainer for SQL and PL/SQL. He has also completed various courses and workshops, including those on deep learning and research methodology.

Dr. Rajesh has authored multiple research papers, with notable publications in journals like the Journal of Hunan University (Natural Sciences), International Journal of Innovative Technology and Exploring Engineering (IJITEE), and International Journal of Computer Science and Technology (IJCTT). His technical skills include programming languages such as C, Java, Python, and C++, as well as expertise in SQL, PL/SQL, and web technologies like HTML, JavaScript, and XML.

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# **Best Researcher Award**



Dr. M. CHINNADURAI, M.E., Ph.D., Professor, Department of CSE, E.G.S. Pillay Engineering College (Autonomous), Nagapattinam – 611 002.

Dr. M. Chinnadurai has made notable contributions across educational, professional, and research domains. He completed his Ph.D. in Computer Science and Engineering from Anna University, Chennai, in 2016, with a thesis focused on optimizing scheduling algorithms in high-level synthesis tools. He holds an M.E. in Computer Science and Engineering from Jayaram College and a B.E. in Computer Science from E.G.S. Pillay Engineering College. Dr. Chinnadurai currently serves as a Professor and the Controller of Examinations at E.G.S. Pillay Engineering College, where he has held various roles, including Registrar, Professor, and Head of Department. His career spans over two decades, with significant teaching expertise in subjects like Operating Systems, Database Management, Compiler Design, and VLSI Design. He has been instrumental in the accreditation processes for NAAC, NBA, and ISO, alongside his leadership as IQAC Coordinator. Dr. Chinnadurai is a renowned researcher with over 10 years of experience, focusing on VLSI CAD, low power VLSI design, high-level synthesis optimization, data mining, and analytics. He has published numerous papers in reputable journals and has guided 15 Ph.D. scholars, with ongoing research supervision for 11 scholars. His externally funded projects, supported by agencies like TNSCST, AICTE, and DST, cover areas such as skill development, IoT challenges, and mobile robot trajectory planning. He has been recognized with awards like the Game Changer Award from ICT Academy and Mr. Saravanan Award for Best Student, reflecting his outstanding contributions to both academia and research.

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# **Excellence in Leadership Award**



Dr. P. RAMANATHAN, M.E, Ph.D., Professor, Department of ECE, Vice Principal Academics, Madanapalle Institute of Technology & Science, Madanapalle – 517 325.

Dr. P. Ramanathan completed his B. E in Electronics and Instrumentation Engineering during April 1997 from Bharathiar University, Coimbatore. He Completed his Post Graduate Diploma in Medical Instrumentation Technology during April 1999 from Coimbatore Institute of Technology, Coimbatore. He completed his Masters in Engineering (VLSI Design) from PSG College of Technology during May 2006. Further he completed his Ph.D. (Information and Communication Engineering) from Anna University during May 2010. He is a Life member of ISTE, IETE and IEI. He has around 24 years of teaching experience. He published 25 research articles in reputed National / International Journals. He has presented his 12 papers in National and International Conferences. He worked at ECE Department, PSG College of Technology, Coimbatore for a period of ten years from May 2000 to June 2010. He worked at Manipal University Dubai Campus as Assistant Professor for a period of 1 1/2 Years. He further joined Info Institute of Engineering, Coimbatore and continued his service as Professor and Head of ECE Department for a period of 5 1/2 Years. He is currently working as Professor, ECE Department & Vice Principal Academics at Madanapalle Institute of Technology & Science, Madanapalle, Andhra Pradesh since 2018. He has completed nearly 20 Swayam NPTEL Courses. He secured NPTEL Domain Scholar Certification in Computer Science and Engineering (Data Science) during January - April 2024 Session and NPTEL Domain Scholar Certification in Computer Science and Engineering (Systems) during January - April 2022 Session. He was also recognized as NPTEL Discipline Stars and NPTEL Superstars.

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# **Innovation in Education Award**



Dr. KALPANA. D. M.Sc., M.Phil., NET, MCA, P.h.D., Head, Department of Computer Applications, J.H.A. Agarsen College, Madhavaram, Chennai – 600 060.

Dr. Kalpana D is a distinguished educator with over 20 years of experience in the field of computer science. Holding a Ph.D. from Bharathiar University and a UGC NET qualification, she is well-equipped with a wealth of academic knowledge. Her expertise is supported by master's degrees in Information Technology and Computer Applications, along with a Bachelor's degree in Computer Applications. Her career has flourished in leadership positions at prominent colleges, including Valliammal College for Women (2004-2010) and J.H.A. Agarsen College (2010-present). As the Head of the Department of Computer Applications at J.H.A. Agarsen College, she has significantly contributed to the college's development, including enhancing placement training programs and playing a pivotal role in the Permanent Affiliation Committee and IQAC & NAAC activities. Dr. Kalpana has been instrumental in improving the quality of education and increasing the college's recognition. Her teaching expertise spans a range of subjects from Computer Networks to Artificial Neural Networks, with a proven ability to guide both undergraduate and postgraduate students. In addition to her teaching roles, she has successfully mentored numerous students, assisting them with their project work in BCA, MCA, M.Sc. (IT), and B.Sc. (CS). Dr. Kalpana has also made significant contributions to research and publication. She authored a book on "Programming in Java" and has published several research articles on Artificial Neural Networks and Image Compression. Her participation in national conferences and seminars reflects her ongoing commitment to advancing knowledge in her field. Outside the classroom, Dr. Kalpana is committed to professional development, regularly participating in faculty development programs and workshops. Her interests include programming languages such as Python, Big Data Analytics with R, Cyber Security, and AI in education. Her exceptional contributions to the field of computer science education have earned her the "Best Women Faculty Award." Dr. Kalpana's versatility extends beyond her academic life-she is also passionate about Carnatic music, playing the Veena, drawing, and participating in cultural events, which adds a rich dimension to her personality. In summary, Dr. Kalpana D's career embodies leadership, dedication, and a commitment to lifelong learning. Her achievements in academia, mentorship, and research make her a role model for future educators, and her journey is an inspiration to all who wish to shape the minds of the next generation.

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# **Innovative Trainer Award**



Dr. MARTIN DHINAKARAN R.A.D, M.E., MBA, Ph.D., Head Communications & Founder of Jehovah Nissi Inc. (A Govt. of India Regd.), IFET College of Engineering, IFET Nagar, Gangarampalayam, Villupuram.

Dr. R.A.D. Martin Dhinakaran is a highly accomplished academic and professional with more than 15 years of rich corporate experience. He holds a Doctorate in Instrumentation and Control Engineering from Puducherry Technological University and an MBA in Human Resource Management from Pondicherry University. His credentials are further bolstered by a Master's degree in Electronics and Communication Engineering and a Bachelor's degree in Electronics and Instrumentation Engineering. As the Founder of Jehovah Nissi Inc., a Government of India registered firm, Dr. Dhinakaran has made notable contributions to corporate training and development. He is a seasoned corporate trainer, speaker, and mentor specializing in soft skills, communication, leadership, and career coaching. Dr. Dhinakaran's ability to translate complex technical content into practical knowledge has enabled him to empower over 100,000 people through skill training and bilingual translation at conferences across India. He is a certified TOEFL trainer, an international career coach, and an influential speaker at both national and international events. His accolades include being a resource person, motivational speaker, and a reviewer at several prestigious conferences. Dr. Dhinakaran's vast array of expertise extends to areas like business writing, emotional intelligence, interview skills, decision-making, and stress management, all of which he imparts through specialized training programs. His professional engagements include prominent institutions such as IFET College of Engineering, SRM University, Vinavaka Missions University, and D.G. Vaishnav College, where he has delivered lectures, conducted workshops, and mentored students on a wide range of subjects. Dr. Dhinakaran's experience in leadership and management has further helped him guide and mentor budding professionals and students toward career success. Dr. Dhinakaran's contributions also include authoring the self-published book Tills – Enlightening the Path of Life. His active involvement in professional organizations like IEEE, ISTE, and IEEE, among others, underscores his commitment to the advancement of education and technology. Additionally, he is an advocate for entrepreneurship and angel investing, helping early-stage entrepreneurs secure venture capital funding for their startups. A passionate educator and inspirational figure, Dr. Dhinakaran is dedicated to shaping future leaders through innovative training, insightful mentorship, and continuous professional development.

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# **Innovation in Education Award**



Dr. SAMSON RAVINDRAN RAJAMANI, B.E., M.S., M.B.A., PhD (Solar), PhD (Bio-Engineering), Professor/ECE, Executive Director, Mahendra Educational Institutions, Salem.

Dr. R. Samson Ravindran, an esteemed academic leader and accomplished administrator with over 30 years of experience in technical education, is currently the Executive Director of Mahendra Educational Institutions, Tamil Nadu. His professional journey reflects a steadfast commitment to fostering innovation, academic excellence, and student-centric growth. With expertise in strategic planning, faculty management, research promotion, and technology integration, Dr. Ravindran has consistently enhanced institutional reputation and educational outcomes. As Executive Director, he has spearheaded strategic initiatives, strengthened research and development efforts, and established impactful partnerships with industry and academia, benefiting both students and faculty. Previously, as Principal of Mahendra Engineering College, he achieved 100% placement rates and organized national and international seminars, elevating the institution's standing. At C.S.I Polytechnic College, he developed innovative teaching methodologies and fostered an environment of discipline and academic rigor. Dr. Ravindran holds dual Ph.D. degrees in Biomedical Engineering and Solar Energy, along with advanced qualifications in Electronics and Control Engineering, Business Administration, and Electrical and Electronics Engineering. He has supervised nine Ph.D. scholars and published extensively on cutting-edge technologies in engineering and education. Recognized with numerous awards, including the Lifetime Achievement Award from the United Writers Association and the Jewel of India Award. Dr. Ravindran is a celebrated educator and leader. His professional affiliations include Fellow of the Institute of Engineers (India), Life Member of the Indian Society of Technical Education, and National Executive Council Member of ISTE, New Delhi. Committed to advancing higher education, Dr. Ravindran aspires to contribute as Vice Chancellor by driving academic success and fostering a collaborative and innovative learning environment.

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# **Excellence in Leadership Award**



Dr. M. ANTO JULIET MARY, Ph.D., Associate Professor, School of Management, Mount Carmel College, Bengaluru.

Dr. M. Anto Juliet Mary, Associate Professor at the School of Management, is a seasoned academician and industry expert with over 23 years of experience. She holds a Ph.D. in Management from Bharathiar University and has an impressive record of publications in Scopus, UGC Care-listed journals, and other peer-reviewed platforms. Currently serving at Mount Carmel College for Women, Bengaluru, Dr. Mary has led numerous impactful initiatives, including bridging employability skill gaps, enhancing placement metrics, and coordinating strategic research projects. She has been honored with several prestigious awards, including the Innovative Trainer Award (2023) by ISTD, for her contributions to training and development. Known for her leadership, interdisciplinary collaboration, and mentorship, Dr. Mary seamlessly integrates academic excellence with professional insights, fostering innovation and excellence in management education.

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# **Best Faculty Award**



Dr. SURESH KUMAR R, M.E., Ph.D., Professor, Department of Mechanical Engineering, R.M.K. Engineering College, R.S.M. Nagar, Kavaraipettai, Thiruvallur..

Dr. R. Suresh Kumar is a distinguished academic in the field of Mechanical Engineering, currently serving as a Professor in the Department of Mechanical Engineering at R.M.K. Engineering College, Kavaraipettai, where he has been working since January 2006. With a Ph.D. in Mechanical Engineering from Anna University, Chennai, Dr. Suresh Kumar has made significant contributions to research in the areas of thermal power, nanofluids, heat pipes, and energy systems. He has published extensively in renowned international journals, with numerous citations for his work on heat transfer, thermal performance of heat pipes, and nanofluids. His research has resulted in four patents, including innovations in automatic air filling systems, tyre pressure inflation systems, and nano-particle-based air purifiers. Dr. Suresh Kumar is a recognized supervisor for doctoral students and has led several funded research projects, such as "Low Cost Evacuated Tube Heat Pipe Solar Water Heater for Villages" and "Automated Guided Vehicle." His work has garnered multiple accolades, including the National Level Best Mentor Award, the ISTE Best Faculty Advisor Award, and the IEI Academic Excellence Award. Additionally, he has contributed to academic literature with books and journal articles, further advancing the field of mechanical engineering.

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#### **Inspiring Healthcare Educator Award**



Dr. SHANMUGAPRIYA K, Pulmonologist., Respiratory Medicine – Department, Sri Lalithambigai Medical College and Hospital, Chennai.

Dr. Shanmuga Priya is an accomplished Associate Professor in the Department of Respiratory Medicine at a prestigious medical college. With over a decade of experience as a consultant and interventional pulmonologist, she has made significant contributions to patient care, medical education, and research. During the COVID-19 pandemic, Dr. Priva demonstrated her expertise and dedication by managing more than 2,000 cases, ranging from outpatient to critically ill patients. Dr. Priya has a robust academic profile, with numerous publications in national and international indexed journals. She has actively presented her research through oral and poster presentations at various state and national conferences. Her ongoing funded projects and membership in organizations such as the IMA, JAPT, and ICS further reflect her commitment to advancing the field of respiratory medicine. She also serves on the Curriculum Committee at Sri Lalithambigai Medical College and holds the role of Deputy In-Charge and Research Coordinator for the CV Raman Research Council. A dynamic speaker and educator, Dr. Priva has participated in webinars and delivered awareness talks on asthma, tuberculosis, COPD, and occupational lung diseases in hospitals, colleges, and public forums. She is a resource faculty member for revised basic course workshops in medical education technologies and is actively involved in undergraduate and postgraduate teaching. class scheduling, and mentoring. Her leadership extends to organizing CMEs, rallies, awareness programs, and free medical camps, offering services such as pulmonary function tests and medicines to the general population. Dr. Priya's clinical expertise is evident in her proficiency with procedures like ICN insertion, TBNA, bronchoscopy, and biopsies. She is a member of DOTS and NTEP programs, treating numerous pulmonary and extra-pulmonary TB cases. Additionally, she has been invited as a speaker for CMEs, conferences, and as a judge for academic competitions. Beyond her professional achievements, Dr. Priya has a passion for extracurricular activities, including dancing, chess, and rangoli. Her involvement in NAAC coordination, training in extra-pulmonary TB management at AIIMS New Delhi, and dedication to medical education underscore her holistic approach to professional excellence and community service.

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# Life Time Achiever Award



Dr. A MATHAN KUMAR, BA., LLB., MA, M.Phil., MBA., Administrative Manager & PRO, Sri Krishna College of Technology, Coimbatore - 641 042.

Dr. A. Mathan Kumar is a seasoned professional with 25 years of experience in education administration, specializing in leadership, policy development, and legal affairs. He holds an honorary doctorate from Global Human Peace University for his excellence in Public Administration. Dr. Kumar's academic qualifications include a Bachelor of Arts in Public Administration, Master of Arts in Public Administration, M.Phil. in Public Administration, an MBA, and an LLB, all earned from renowned institutions. He has worked in various administrative roles, including Administrative Manager, PRO, HR Assistant, and Cashier Cum Assistant at institutions like Sri Krishna College of Technology, Hindusthan College of Engineering, and Thiruvalluvar College of Engineering. His key skills include leadership, financial planning, conflict resolution, and legal affairs handling. Among his notable achievements are increased student enrollment and the successful implementation of new programs and technologies. Dr. Kumar's commitment to education and administration is well-recognized through his prestigious honorary doctorate award.

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# **Excellence in Research & Innovation Award**



Dr. UDHAYAKUMAR P, M.E., M.B.A., Ph.D., Professor & Head, Department of Mechanical Engineering, Training and Placement Officer, K.L.N. College of Engineering, Pottapalayam, Sivagangai - 630 612.

Dr. P. Udhayakumar is a Professor and Head of the Department of Mechanical Engineering at K.L.N. College of Engineering, Madurai. With over two decades of experience in academia, he has been instrumental in shaping the education and research landscape of the institution. His academic qualifications include a Ph.D. in Mechanical Engineering from Anna University, an MBA, and a Master's degree in CAD/CAM. Dr. Udhayakumar has published numerous research papers in reputed journals and has guided several Ph.D. scholars. He has received multiple accolades, including the "Best Faculty Award" from The Institution of Engineers (India) and the "Research Excellence Award" from IEAE. Additionally, his dedication to student development is reflected in his recognition as one of the Top 50 Training and Placement Officers in India by uLektz. His areas of interest include material science, manufacturing processes, and composite materials.

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# **Innovative Leadership in Education Award**



Dr. VASUKIDEVI G, Ph.D., Associate Professor, Computer Science and Engineering, R.M.K. Engineering College, R.S.M. Nagar, Kavaraipettai, Thiruvallur.

Dr G Vasukidevi is an experienced academic professional with over 20 years of teaching expertise, She is eager to contribute her knowledge and skills in an ever-growing research-oriented environment. Her aim is to foster growth in organization through a continuous process of learning, teaching, and staying abreast of the latest technological innovations. She has published more than 20 Journal paper in International journal. Delivered lectures on Python Programming and C Programming at prestigious colleges. Secured consultancy projects worth Rs. 3,20,000 from Agira Technologies (2020-22). Published two patents: "A System for Digital Content Verification using Blockchain Technology" and "Design of a Collapsible and Portable Lactation Module for Mothers". Awarded Academic Excellence Award by MSME, Government of India (2021).

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# **Best Faculty Award**



Dr. HEMALATHA A, M.E., Ph.D., Associate Professor, Department of Mechanical Engineering, KLN College of Engineering, Pottapalayam.

Dr. A. Hemalatha holds a Bachelor's degree in Mechanical Engineering (1999) from R.V.S. College of Engineering & Technology, a Master's degree in Industrial Engineering (2007) from Thiagarajar College of Engineering, and a Ph.D. in Mechanical Engineering from Anna University (2020). With over 22 years of teaching experience, she has served in various academic roles, including as a Lecturer at R.V.S. College of Engineering & Technology and SACS.MAVMM College of Engineering & Technology, before becoming an Associate Professor at K.L.N. College of Engineering, where she currently teaches. Dr. Hemalatha has authored numerous publications in reputable international journals such as Alochana Journal and Materials Research, focusing on topics like composite materials, process optimization, and additive manufacturing. She has also contributed to books and conference proceedings, including a book chapter on heat-resistant coatings in Coatings for High-Temperature Environments (2023) and a paper on health care product design at the 39th National Convention of Mechanical Engineering (2024). Dr. Hemalatha has organized over 23 workshops and short-term courses, including the Workshop on Applications of Computational Fluid Dynamics (2011) and Lean Six Sigma Green Belt Certification (2017). Her contributions extend to four filed patents, including the development of an automated triple coconut scraper and a 3D-printed foot insole system. She has also participated in industrial training, notably in SPM Design (2018), and provided consultancy in asset valuation for HiTech Arai Ltd., Madurai, valued at ₹5,04,000. Dr. Hemalatha's work integrates academic excellence with practical industrial experience, making her a recognized figure in the fields of mechanical engineering and industrial optimization.

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# **Innovative Educator in Humanities Award**



Dr. V. KALPANA, M. A, Mphil, PGCTE, SLET, PHD., Assistant Professor, Department of English, R.M.K. College of Engineering and Technology, Puduvoyal, Thiruvallur.

Dr. Kalpana is an Assistant Professor of English at RMKCET, where she shares her passion for teaching and learning with her students. She holds a PhD after her MPhil, MA, and PGCTE, bringing a depth of knowledge and experience to the classroom. In her free time, Dr. Kalpana enjoys reading newspapers, cooking, and exploring the countryside on her bike. Her love for language, literature, and learning is evident in her dedication to her students and her commitment to helping them achieve their academic goals.

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# **Innovation in Education Award**



Dr. ANBUMEENAKSHI C, Ph.D., Associate Professor, Department of Mechanical Engineering, K.L.N College of Engineering, Pottapalayam.

Dr. C. Anbumeenakshi is a faculty member specializing in Thermal Engineering, Fluid Mechanics, Machinery, and MEMS. She holds a Ph.D. in Mechanical Engineering from Anna University Chennai (April 2018) and an M.E. in Production Engineering from Thiagarajar College of Engineering (June 2005), where she graduated with First Class with Distinction. She also earned her B.E. in Mechanical Engineering from Bharath Niketan College of Engineering, Madurai Kamaraj University in April 2003, with First Class with Distinction. Dr. Anbumeenakshi has had extensive teaching experience, beginning as a Lecturer at SACS M.A.V.M.M. Engineering College (2005-2007), then as an Assistant Professor at K.L.N. College of Engineering, Pottapalayam (2007-2013), followed by the role of Associate Professor from 2013 to 2018, and she is currently serving as a Professor (SG) from December 2018. Over the years, she has published several research papers in international journals, including "Experimental Investigation of Flow Maldistribution in Microchannels" in Experimental Thermal and Fluid Science (Elsevier), and "Effectiveness of Nanofluid Cooled Microchannel Heat Sink" in Applied Thermal Engineering (Elsevier). She has contributed to multiple national and international conferences, with notable presentations on microchannel heat sink designs and experimental investigations on flow distribution and heat transfer in MEMS applications. Dr. Anbumeenakshi's research interests also include studying nanofluid behavior, mass flow distribution, and heat transfer enhancement in microchannel systems, with several journal papers in SCI-indexed journals.

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# Lifetime Achievement Award in Computer Science and Engineering



Dr. G. Fathima, Ph.D., Professor & Head, Department of CSE, Adhiyamaan College of Engineering, Hosur.

Dr. G. Fathima has done her B.E at Thiagarajar College of Engineering Madurai, M.E at N.I.T, Trichy and Ph.D. at Anna University, Chennai in 2012 in the field of Computer Science and Engineering. She has started her teaching career as Lecturer in 1994 and elevated as Assistant, Associate Professor and Professor. She has more than 27 years of teaching experience and more than 17 years of administrative experience. She is the Institution's SPoC for the Smart India Hackathon, and numerous teams have competed in the grand Finale under her guidance. She has organized several numbers of national and international symposium, workshops, seminar and Project competitions for the benefit of students. She has organized FDPs for the benefit of faculties. She has Published 33 papers in International Journals and presented 29 papers in various International/National Conferences. She has filed and published 4 patents out of which 1 patent has got granted. She has authored 11 Book and Book Chapters. She has received grant for minor research project from UGC, AICTE, IE(I) and TNSCST. She is Life member of ISTE, IE(I). Received Best Project Award from IE(I). Received International Educator of the year 2022 Award from I2OR, Senior educator and scholar award from NFED. Best Administrator Award from Abdul Kalam Educational Trust. Received Faculty Excellence Award from Infosys. Her area of interest includes Mobile Adhoc networks, Cryptography, Data Mining and Image Processing. She is recognized supervisor of Anna University, Chennai. Two Scholars have been awarded Doctoral degree under her guideship. Eight Scholars are pursuing currently. She is doctoral committee member of scholars at VTU and VIT. She is an Enthusiastic educator with a genuine passion for teaching and a strong commitment to student growth. She has Eager to foster a dynamic learning environment that engages and empowers students. To add on, she Embraces challenges as opportunities for growth, continuously seeking innovative ways to enhance the learning experience. She is currently serving as Professor and Head of CSE Department of Adhiyamaan College of Engineering, Hosur, Tamil Nadu, India.

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# **Inspiring Educator of the Year Award**



Mrs. JAYALAKSHMI V, M.A. M.Phil. Ph.D., Assistant Professor, Department of English, R.M.K. College of Engineering and Technology, Puduvoyal, Thiruvallur.

Ms. Jayalakshmi V, Assistant Professor of English, R.M.K College of Engineering and technology, has been an empathetic teacher all her life. She has been teaching English for the past 17.9 years and has been an ardent believer of values. She has organized many events and conducted many conferences, seminars and webinars as well. She has published papers and is still attending online courses and webinars because she believes in being a life- long learner. She wakes up every morning hoping the best for the student community. She is ambitious and arduous. She hopes to achieve being the best teacher that she could be.

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# **Excellence in Interventional Pulmonology Award**



Dr. P. M. ANBUMARAN, M.B.B.S, M.D., Associate Professor, Respiratory Medicine, Department of Respiratory Medicine, Saveetha Medical College and Hospital, Saveetha University, Thandalam.

Dr. P. M. Anbu Maran is a highly experienced medical professional with extensive academic and clinical contributions in the field of Respiratory Medicine. He has presented at several national conferences, including NAPCON and TAPCON, and has contributed to multiple journal publications on topics such as lung carcinoma, rare hypoxemia cases, and advancements in artificial intelligence for diagnosing multidrug-resistant tuberculosis. With an M.D. in TB & Pulmonary Medicine, he has held various positions, including Medical Officer, Junior and Senior Resident, and Assistant Professor in Respiratory Medicine at esteemed institutions. Dr. Anbu Maran continues to excel as an Associate Professor at Saveetha Medical College & Hospital, Chennai. His involvement in Continuing Medical Education (CME) programs and workshops has further cemented his reputation as a knowledgeable and dedicated professional. Additionally, he has guided several undergraduate theses, focusing on bronchiectasis and COPD patients, contributing to the academic growth of the medical community.

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## Academic Leadership and Research Excellence Award



Dr. MUDHU KRISHNAN M, M.E., Ph.D., Associate Professor, Department of Mechanical Engineering, R.M.K. Engineering College, R.S.M. Nagar, Kavaraipettai, Thiruvallur.

Dr. M. Mudhu Krishnan is an Associate Professor in the Department of Mechanical Engineering at R.M.K. Engineering College, Kavaraipettai, Chennai, with 19 years of experience in the field. He completed his B.E. in Production Engineering from the University of Madras in 1999, M.E. in Manufacturing Engineering from Anna University in 2002, and his Ph.D. in 2018 from Anna University. His Ph.D. thesis was titled "Fabrication and Machining of Fiber Reinforced Thermoplastic Composites" under the guidance of Dr. P. Hariharan. Dr. Mudhu Krishnan's research interests include additive manufacturing, fiber-reinforced composites, and machining of composite materials. He has authored several publications in prominent journals, including Current Opinion in Chemical Engineering, Measurement, and Materials Today: Proceedings. His work primarily focuses on drilling, machining, and analysis of composite materials like fiber-reinforced polypropylene. He has also contributed to optimization studies in machining parameters and the development of sustainable manufacturing processes for composite materials. In addition to his academic contributions, Dr. Mudhu Krishnan has a published patent and has been involved in collaborative research projects.

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# **Outstanding Academic Leadership Award**



Dr. S. PERUMAL, Ph.D., Professor, Department of Computer Science, Vels University, Pallavaram, Chennai.

Dr.S.Perumal currently working as Professor in the Department of Computer Science ,Vels University, Pallavaram, Chennai with 30 years of experience in Academic Field. Worked with leading Universities like University of Madras, Bharathidasan University, Manomanium Sundranar University etc. He received Ph.D degree in Computer science from Vel's University in the year 2018 and M.Phil degree from Periyar University in the year 2005. He received M.Sc., degree in Computer Science from Bharatidasan University in the year 1994 and B.Sc., Computer Science from Madras University in the year 1992. He had produced 11 Ph.D scholars 25 M.Phil Scholars and rightly guiding 9 Ph.D. Researchers and published 60 articles in reputed international journals. He had 9 patents for his credit and received 11 awards. Some of the awards to list: Best HOD – 2022 CST Softech. FACULTY EXCELLENCE AWARD – 2022.VISTAS, CHENNAI. Global Eminent Academician Award – 2022.VIJ Trust. FACULTY EXCELLENCE AWARD – 2021 VISTAS. Best Senior Faculty – 2021 Chennai Softech. Excellence in Teaching – 2020 Sri Karunandha Trust.

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**Best Emerging Oncologist Award** 



Dr. DEEPIKA.B, MD Radiation Oncologist., Consultant, Radiation Oncology, MGM Cancer Institute, Nelson Manickam Road, Chennai.

Dr. Deepika B., an accomplished Radiation Oncologist, has over six years of specialized experience in Radiation Oncology and three years of general medical practice. She holds an MD from the Cancer Institute (WIA), Adyar, Chennai, and an MBBS from SRM Medical College, Chennai, with additional certifications in Basic and Advanced Life Support. Dr. Deepika is proficient in advanced techniques such as IMRT, Rapid Arc, SRS, and Brachytherapy, with expertise in managing head and neck, breast, and gynecological oncology. Her professional journey includes roles as a Lecturer, Resident Doctor, and General Practitioner, showcasing her dedication to patient care, medical education, and multidisciplinary collaboration. With a passion for continuous learning, she has presented research at national conferences and remains committed to enhancing her skills and contributing to advancements in oncology. Outside her practice, Dr. Deepika enjoys community service, singing, swimming, and meditation, embodying empathy and perseverance in both her professional and personal life.

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## **Best Faculty Award**



Dr. S. JOTHILAKSHMI, Ph.D., Associate Professor, Department of Chemistry, R.M.K. College of Engineering and Technology, Puduvoyal, Thiruvallur.

Dr. S. Jothilakshmi is a distinguished academician and researcher with 16.5 years of teaching experience. Currently serving as an Associate Professor, Dr. Jothilakshmi has established herself as a prominent figure in her field. Dr. Jothilakshmi holds a Ph.D. in her area of expertise, demonstrating her commitment to academic excellence. Her research endeavors have resulted in the publication of 11 papers in esteemed journals, with 5 papers featured in SCI-indexed journals and 6 in Scopus-indexed journals.Her academic prowess has earned her the prestigious Anna University Guideship, a testament to her exceptional research guidance and mentorship skills.With over 16 years of teaching experience, Dr. Jothilakshmi has developed a unique pedagogical approach, blending theoretical foundations with practical applications. Her expertise has inspired numerous students, fostering a love for learning and intellectual curiosity. As she continues to inspire and guide future generations, her legacy as a scholar, teacher, and leader will endure.

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# **Excellence in Interventional Pulmonology Award**



Dr. GOMATHI. R. G, MD Pulmonologist., MD TB & Chest Medicine, Pulmonology, Kilpauk Medical College and Hospital, Chennai.

Dr. Gomathi R.G., a dedicated Pulmonologist with an M.D. in TB & Pulmonary Medicine from Sri Ramachandra Medical University, Chennai, and an M.B.B.S. from Pondicherry University, possesses extensive expertise in respiratory care and interventional pulmonology. She has honed her skills through clinical appointments, including roles as Junior Resident in Medical Oncology and General Medicine at Apollo Specialty Hospitals. Dr. Gomathi has advanced procedural proficiency in bronchoscopy, thoracoscopy, pleural tapping, and critical care interventions such as endotracheal intubation and arterial line insertion. Her academic contributions include a published research paper on pulmonary nocardiosis and a thesis on bronchoscopy's role in pleural effusion. A frequent participant in national conferences and workshops, Dr. Gomathi has presented on topics like pulmonary hypertension and obstructive sleep apnea, showcasing her keen interest in interventional pulmonology and respiratory medicine. She has actively engaged in seminars such as the "Advance Bronchoscopy and Thoracoscopy" workshop and the "Ramachandra Rapid Review in Respiratory Medicine," enriching her knowledge in specialized areas of pulmonology. Outside her clinical pursuits, Dr. Gomathi remains committed to advancing the understanding and treatment of pulmonary diseases, exemplifying her dedication to patient care and academic excellence.

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# **Excellence in Research & Innovation Award**



Dr. AGNIBHA DAS MAJUMDAR, Ph.D., Assistant Professor, Department of Physics, Madanapalle Institute of Technology and Science, Andhra Pradesh.

Dr. Agnibha Das Majumdar, an accomplished physicist and Assistant Professor in the Department of Physics at Madanapalle Institute of Technology and Science, Andhra Pradesh, specializes in atomic and molecular spectroscopy, computational physics, and food technology. With a Ph.D. in Physics from Lovely Professional University, Punjab, he has cultivated expertise in spectroscopy techniques, including near-infrared spectroscopy, and theoretical modeling through extensive research experience spanning over four years.

Dr. Majumdar's research accomplishments include more than 35 publications in highimpact Scopus, WoS, and UGC-indexed journals, along with 25+ presentations at national and international conferences. His contributions to academia are further highlighted by his invitations as a speaker at prestigious webinars and workshops, where he has shared insights on spectroscopy, research methodology, and advanced data analysis. He is also the recipient of several accolades, such as the 3rd Prize for Oral Presentation at ICAATAS-2022. An advocate for knowledge dissemination, Dr. Majumdar has organized international conferences and workshops, fostering collaborative research. His technical proficiency includes tools like MS Excel, SPSS, OriginLab, CRYSTAL06, and programming in Turbo C++. Additionally, he has contributed to the academic community as a resource person in faculty development programs and workshops on research writing and data analysis. His academic and professional journey reflects a passion for research and teaching, with a strong commitment to leveraging physics' potential in interdisciplinary fields.

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## **Best Faculty Award**



Mrs. JAYANTHI N, M.SC, M.PHIL., Assistant Professor, S&H - Physics, R.M.K. College of Engineering and Technology, Puduvoyal, Thiruvallur.

Mrs. N. Jayanthi is an experienced faculty member at R.M.K. College of Engineering and Technology, serving in the Department of Science and Humanities (Physics). With a career spanning over 15 years, she has contributed significantly to academic research in thermal performance, nanofluids, and environmental-friendly materials. Mrs. Jayanthi has co-authored several journal papers, including studies on heat pipe solar collectors, nanofluids in thermosyphons, and hybrid composites. Her research has been published in renowned journals such as Materials Today: Proceedings and Proceedings of the Institution of Mechanical Engineers. She is also a member of professional organizations like ISTE and the International Association of Engineers (IAENG). In addition to her academic work, Mrs. Jayanthi has successfully secured research grants, including funding for projects related to air conditioning efficiency, automated guided vehicles, and low-cost solar water heaters for rural communities. These contributions highlight her expertise and dedication to advancing the field of Physics and engineering.

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#### **Outstanding Educator Award**



DR. JUSTIN Z, M.A. MPhil. PhD., Assistant Professor, Department of English, R.M.K. College of Engineering and Technology, Puduvoyal, Thiruvallur.

Dr. Justin Z is an accomplished academic with over 22 years of extensive teaching experience in both engineering and school settings. He holds an M.A., B.Ed., M.Phil., and Ph.D. in English Language and Literature, reflecting a deep commitment to his discipline. With his passion for teaching and strong belief in contributing to societal change, Dr. Justin aspires to serve as an Assistant Professor of English in a reputed institution. His career goals are rooted in utilizing innovative methods to cater to the educational needs of students, fostering their growth while contributing to the development of the institution. His areas of expertise include Language, Literature, Speech Communication, Academic Writing, Interpersonal Skills, and Career Development. Dr. Justin is dedicated to both research and administration. His research accomplishments include publishing papers in reputed journals, including five in Scopus-indexed journals and one in Web of Science. Additionally, he has contributed to several conferences and seminars, and his work in the academic community extends to books, with his publication titled 1982 by Pothi Publication in 2020. He also actively engages in online education, with over 125 YouTube video lectures and 10 online courses, including NPTEL, Infosys Springboard, and Udemy courses. Dr. Justin's professional experience spans multiple academic institutions, where he has worked as an Assistant Professor, Associate Professor, and Professor. Notably, he has served at RMK College of Engineering and Technology, Christian College of Engineering and Technology, Saveetha School of Engineering, and AMET University, along with numerous affiliated colleges under Anna University in Tamil Nadu. His work has encompassed teaching undergraduate and postgraduate students, where he has handled subjects like Technical English, Business English, Communication and Soft Skills, Creative Writing in English, and Professional Communication, among others. In his administrative role, Dr. Justin has been involved in managing various academic and departmental activities. He has served as a Class In-Charge, Course Coordinator, and Convenor, demonstrating his leadership and organizational abilities. His contributions extend beyond teaching, as he has organized and convened clubs such as the Theatre Club, Reading Club, and Power Speak Club, enriching the campus community. His leadership extends to his role as a BULATS Speaking Examiner, where he contributed to Cambridge ESOL examinations in 2010-2011. Throughout his career, Dr. Justin has been recognized for his dedication and excellence in teaching. He has received multiple Best Teacher Awards for his academic contributions and produced excellent results, including consistently high semester exam results. He was also honored with a Best Paper Award from a peer-reviewed journal and a Third Prize for Paper Presentation in 2016. A dedicated lifelong learner, Dr. Justin has actively participated in professional development.

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## **Outstanding Educator and Researcher Award**



Dr. SHESHANG DEGADWALA, B.E, M.Tech, Ph.D., Professor & Head, Department of Computer Engineering, Sigma University, Vadodara, Gujarat.

Dr. Sheshang D. Degadwala is presently working as Professor and Head of Computer Engineering Department, Sigma University, Vadodara. He has published 250+ research papers in reputed international journals and conferences including IEEE, Elsevier and Springer. His main research work focuses on Image Processing, Computer Vision, Information Security, Theory of Computation and Data Mining. He is also Microsoft Certified in Python Programming and Excel. He has published 25 books and he got grant for 3 patent. He has published 160 Indian Patent. He has received 50 awards for academic and research achievement.

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## **Innovative Educator Award**



Mrs. CHANDI PRIYA K.G, MCA, M.E., Assistant Professor, Science and Humanities, R.M.K. College of Engineering and Technology, Puduvoyal, Thiruvallur.

Mrs. Chandi Priya K.G. is an Assistant Professor of General engineering at RMKCET, where she shares her passion for teaching and learning with her students. She holds masters in computer science engineering. Priya is passionate and dedicated professional in the field of computer science, with a strong commitment to leveraging technology to solve real-world problems. Her journey in this dynamic domain has been driven by a curiosity for innovation and a desire to make a meaningful impact.

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