

Faculty Profile



Dr. R. Dinesh Kumar, M.Sc., MBA, M.E., Ph.D.
Associate Professor ECE

HIGHLIGHTS:

- Number of Journal Publications: 45
- H-Index: 4
- Project Funding Received: 5
- Patents Published: 3
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: 57201733062
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57201733062>
- Google Scholar ID: SYJh3aAAAAAJ&hl=en
- Anna University Faculty ID: 20257
- AICTE Faculty ID: 1-44106805925
- Anna University Supervisor ID:
- LinkedIn: mail2rdinesh@gmail.com

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 12 Years
- Industrial Experience: 1 year

INTERNATIONAL EXPOSURE:

- Proceeding PDF (Post-Doctoral Fellowship) on Solar power Controller in Singapore Institute of Technology under the guidance of Kuan Tak Tan Professor in Singapore Institute of Technology.

AREA OF SPECIALIZATION:

- Antennas And Wave Propagation.
- Digital Electronics,
- Embedded System,
- Communication Networks.

Ph.Ds AWARDED WITH DETAILS:

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time

Ph.Ds GUIDING: Not Applicable

- Full Time Scholars:
- Part Time Scholars :

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

- DST
- BRNS
- MSME

PATENTS PUBLISHED/GRANTED:

- The patent for "Analysis of Urban Traffic Data as Arbitrary Graph Structure Using Neural Networks" was published on 05/05/2023.
- The patent for "Localization Error Mitigation Technique for Location Enabled IOT in Athlete Training System" was published on 13/01/2023.
- The patent for "Monitoring E-Health Care System Using AI Technique & Methods" was published on 30/12/2022.

COURSES CERTIFIED:

- NPTEL COURSE IN IOT
- International Certificate on CCNA, CCNP.
- International Certificate on SCJP, SCWC.

ACHIEVEMENTS AND AWARDS:

- Young Scientist Award
- Best Faculty Award
- Tamil Nadu Faculty welfare Award
- Best Researcher Award

SPECIAL SESSIONS DELIVERED:

- Delivered lectures in VIT
- Delivered a guest lecture on "BASICS OF ELECTONICS" at Adhiparasakthi Engineering College on 20th October 2022.
- Delivered a guest lecture on "Internet of Things" for II Year EEE students at "PERI Institute of Technology" on 22th October 2021.

- Delivered a guest lecture on "Data Communication Engineering" for the students of Electrical and Electronics Engineering at "Loyola Institute of Technology" on 21st October 2022.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Published Conference on “Sparse Autoencoder with SGRReLU Activation Based Network Intrusion Detection System”, International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT), IEEE, October 2023, SCOPUS Electronic ISBN:979-8-3503-1341-3.
- Published Conference on “An Effective Hand Gesture Recognition using Convolutional Neural Network with Long Short-Term Memory”, International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT), IEEE, October 2023, SCOPUS Electronic ISBN:979-8-3503-1341-3.
- Published Conference on “Hybrid Optimization Based Long Short-Term Memory for Android Malware Detection”, 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT), IEEE, October 2023, SCOPUS Electronic ISBN:979-8-3503-1341-3.
- Published Conference on “Decoding Financial Markets: Unleashing the Power of Bi-LSTM in Sentiment Analysis for Cutting-Edge Stock Price Prediction” 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT), IEEE, 20-21 October 2023, SCOPUS, Electronic ISBN:979-8-3503-1341-3
- Published Conference on CNN-LSTM Based on Crow Search Optimization Algorithm for Product Review Classification” 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT), IEEE, 20-21 October 2023, SCOPUS, Electronic ISBN:979-8-3503-1341-3
- Published Conference on “Feature Selection and Classification of Email Spam Using Orthogonal Linear Jellyfish Swarm Optimizer”, 2024 Third International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), IEEE, 26-27 April 2024, SCOPUS Electronic ISBN:979-8-3503-1860-9.
- Published Conference on “Improving LoRa Low-Power Wide-Area Networks with Double Deep-Q Learning-Based Resource Allocation” 2024 Third International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), 2024 Third International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), IEEE, 26-27 April 2024, SCOPUS, Electronic ISBN:979-8-3503-1860-9
- Published Conference on “Malware Detection and Classification for Internet of Things Using Self-Attention Based Long Short-Term Memory” 2024 Third International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), IEEE, 26-27 April 2024, SCOPUS, Electronic ISBN:979-8-3503-1860-9
- Published Conference on “Energy-Centric Clustering and Routing Using Seagull Optimization Algorithm in Wireless Sensor Networks” 2024 Third International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), IEEE 26-27 April 2024, SCOPUS, Electronic ISBN:979-8-3503-1860-9
- Published Conference on “Energy-Efficient Routing in Underwater Wireless Sensor Networks Through Cluster-Dragonfly Optimization” 2024 Third International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), IEEE, 26-27 April 2024, SCOPUS, Electronic ISBN:979-8-3503-1860-9.
- Published Conference on “Multi-objective de novo Drug Design using Bidirectional Recurrent Neural Networks and Nondominated Sorting” Second International Conference on Data Science and Information System (ICDSIS), IEEE, 17-18 May 2024, SCOPUS, Electronic ISBN: 979-8-3503-8166-5.
- Published Conference on “A Semiconductor Manufacturing Final Test Yield Classification Using Random Forest” Second International Conference on Data Science

and Information System (ICDSIS), IEEE, 17-18 May 2024, SCOPUS, Electronic ISBN: 979-8-3503-8166-5.

- Published Conference on “An Efficient Wafer Semiconductor Surface Defect Inspection Using Radial Basis Functional Neural Network” Second International Conference on Data Science and Information System (ICDSIS), IEEE, 17-18 May 2024, SCOPUS, Electronic ISBN: 979-8-3503-8166-5
- Published Conference on “Deep Learning-Based Dynamic Scheduling for Semiconductor Manufacturing with High Uncertainty of Automated Material Handling System Capability” Second International Conference on Data Science and Information System (ICDSIS), IEEE, 17-18 May 2024, SCOPUS, Electronic ISBN: 979-8-3503-8166-5.
- Published Conference on “Misbehavior Detection for Position Falsification Attacks in VANETs Using Ensemble Machine Learning” Second International Conference on Data Science and Information System (ICDSIS), IEEE, 17-18 May 2024, SCOPUS, Electronic ISBN: 979-8-3503-8166-5.
- Published Conference on “Deep Separable Dilated Convolutional Neural network for Cloud Detection and Removal in Satellite Imagery”, First International Conference on Software, Systems and Information Technology (SSITCON) IEEE, October 2024, **SCOPUS** DOI: 10.1109/SSITCON62437.2024.
- Published Conference on “Personalized Music Recommendation System with Transformer based Convolutional Recurrent Neural Networks using User Emotion Detection”, First International Conference on Software, Systems and Information Technology (SSITCON) IEEE, October 2024, **SCOPUS** DOI: 10.1109/SSITCON62437.2024.
- Published Conference on “Convolutional Neural Network in Combination with Multiple Machine Learning Models to Recognize the Spoken Digits”, First International Conference on Software, Systems and Information Technology (SSITCON) IEEE, October 2024, **SCOPUS** DOI: 10.1109/SSITCON62437.2024.

SCI/SCOPUS PUBLICATIONS:

- Srigitha S. Nath, **R. Dinesh kumar**, KDV Prasad, Deepak Gupta, Pradeep Jangir “Computational approaches to optimize polymerization and curing in low-temperature thermosetting composites for enhanced additive manufacturing efficiency”, Thermal Science and Engineering Progress, **Annexure-1 SCI Q1 journal** (Regular Issue).
- **R.Dineshkumar***, A. Ameelia Roseline, Tatiraju V.Rajani Kanth, J.Nirmaladevi “Adaptive Transformer-Based Multi-Modal Image Fusion for Real-Time Medical Diagnosis and Object Detection”, IJCESEN, **Annexure-1 SCI Q3 journal** (Regular Issue).
- Published SCI Journal on “Graphene Oxide: Unveiling Its Chemistry and Its Emerging Applications”, Russian Journal of General Chemistry, **Annexure-1 SCI Q3 journal** (Regular Issue).
- Published SCI Journal on “Mechanical, water absorption, efflorescence, soundness and morphological analysis of hybrid brick composites”, Revista Materia, **Annexure-1 SCI Q4 journal** (Regular Issue).
- Published SCI Journal on “Ultra-High-Performance Concrete (UHPC): A microstructural and particle packing investigation”, Revista Materia, **Annexure-1 SCI Q4 journal** (Regular Issue).
- Published SCI Journal on “Mechanical, water absorption, efflorescence, soundness and morphological analysis of hybrid brick composites”, Global Nest Journal, **Annexure-1 SCI/Elcievier Q3 journal** (Regular Issue).

- Published SCI Journal on “Numerical analysis of microstructured optical fibers based on flint glass for ultra-high nonlinearity, low loss, and broadband dispersion compensation across telecom bands”, Results in Optics (Elsevier) **Annexure-1 SCI Q3 journal** (Regular Issue).
- Published SCI Journal on “Hybrid anomaly detection: Leveraging autoencoder for feature learning and random forest neural network for discriminative classification”, Journal of Intelligent and Fuzzy Systems, SCI/ IOS Press, **Annexure-1 SCI Q2 journal** (Regular Issue).
- Published SCI Journal on “Predicting diabetes with multivariate analysis an innovative KNN-based classifier approach”, Preventive Medicine, **Annexure-1 SCI Q1 journal** (Regular Issue).
- Published SCI Journal on “VAWGAN-NPOA: Energy-Aware Routing for Innocuous Data Transmission in WSN”, Taylor & Francis Online, IETE Journal of research. <https://doi.org/10.1080/03772063.2023.2300337>. **Annexure-1 SCI Q3 journal** (Regular Issue).
- Published SCI Journal on “Predicting diabetes with multivariate analysis an innovative KNN-based classifier approach”, Elsevier, Preventive Medicine. <https://doi.org/10.1016/j.yjmed.2023.107619>. **Annexure-1 SCI Q2 journal** (Regular Issue).
- Published SCI Journal on “Optimizing residential DC microgrid energy management system using artificial intelligence”, Springer Link, Soft Computing. Annexure-1 SCI Q2 journal (Regular Issue).
- Published SCI Journal on “Block chain-based security and privacy framework for point of care health care IoT devices”, Springer, Soft Computing. Annexure-1 SCI Q2 journal (Regular Issue).
- Published SCI Journal on “Sustainable Energy Management and Control for Variable Load Conditions Using Improved Mayfly Optimization”, Sustainability 2022, 14, 6478. <https://doi.org/10.3390/su14116478>. **Annexure-1 SCI Q1 journal** (Regular Issue).
- Published SCI Journal on “Survey of Feeding Techniques to Improve Bandwidth of Microstrip Patch Antenna”, International Journal of Applied Engineering Research Vol 10, Issue 17 (2015) **SCOPUS** (IF: 2.0653).
- Published Scopus Journal on “An Efficient QRS Detection and Pre-processing by Wavelet Transform Technique for Classifying Cardiac Arrhythmia”, International Journal of Intelligent Systems and Applications in Engineering, IJISAE, 2023, 11(8s), 490–498 **SCOPUS** ISSN:2147-6799.
- Published Scopus Journal on “Hybrid Feature Selection Model for Computer Aided Diagnosis System in Lung Segmentation”, International Journal of Intelligent Systems and Applications in Engineering, IJISAE, 2023, 11(8s), 517–525 **SCOPUS** ISSN:2147-6799.
- Published Scopus Journal on “Energy Efficient Weighted Probability Model Integrated Cloud-IoT Network to Increase Lifetime of the Network with Layered Architecture”, International Journal of Intelligent Systems and Applications in Engineering, IJISAE, 2022, 10(2s), 221–225 **SCOPUS** ISSN:2147-67992.
- Published Scopus Journal on “Wireless Sensor Network Security with the Probability Based Neighborhood Estimation”, International Journal of Intelligent Systems and Applications in Engineering, IJISAE, 2022, 10(2s), 231–235 **SCOPUS** ISSN:2147-67992.
- Published Scopus Journal on “Linguistic Based Emotion Detection from Live Social Media Data Classification Using Metaheuristic Deep Learning Techniques”, International Journal of Communication Networks and Information Security Volume 14 Issue 03 Year 2022 Page 176:186 **SCOPUS** (IF: 2.0653) ISSN: 2073-607X, 2076-

0930.

- Published Scopus Journal on “Investigations on the Hardware Components and Internetworking Architectures of Wireless Sensor Network for Environmental Monitoring”, Turkish Journal of Computer and Mathematics Education Vol.9 No.03 (2018), 750-755 **SCOPUS**.
- Published Scopus Journal on “Sustaining Battery Lifetime and Reliable Communication in Surveillance Applications of WSNs”, Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 11, Issue 2, June 2020: 538-544.
- Published Scopus Journal on “Dipole Micro-strip Patch Antenna Design for Tri-Band Frequencies”, Indian Journal of Forensic Medicine & Toxicology, July-December 2017, Vol. 11, Issue No. 2. **SCOPUS**.
- Published Scopus Journal on “Multi-Band Antenna Design for Medical Applications”, International Journal of Electrical and Computer Engineering, December, Vol. 10, Issue No.5.
- Published Scopus Journal on “Reconfigurable Antenna Design for Soil Testing to Improve Soil Quality”, International Journal of Engineering and Technology, Vol. 7, pp. 70-73, 2018.

PROFESSIONAL MEMBERSHIPS:

- IEEE
- IETE

OTHER DETAILS (If any):

- Five Days Workshop Attended in VIT, Chennai.
- More Than 20 Seminars Attended.