

2025-2026 Faculty Publication And Book

Dr.N.S Kavitha

Books

[B1] K. Kavitha, High-Performance Computing for Scientific, Industrial, and AI-Driven Applications. ISBN: 978-81-998728-1-3, 2025. The book highlights advanced computing architectures and their applications in scientific research, industrial automation, and artificial intelligence systems.

Conference Publications

[C1] K. Kavitha, “AI-Enhanced Robotics in Healthcare: Transforming Diagnosis and Treatment,” presented at an IEEE International Conference, 2025. The work explores the integration of artificial intelligence with robotic systems for healthcare diagnosis and treatment applications. (Scopus Indexed).

[C2] K. Kavitha, “Efficient YOLOv8 Model for Licence, Helmet and Person Detection,” IEEE International Conference, 2025. The paper proposes an efficient YOLOv8-based framework for intelligent traffic surveillance and safety monitoring. (Scopus Indexed).

Dr. R Kumar

Conference Publications

[C1] Dr. Kumar co-authored five research papers presented at IEEE and international conferences including ICICNCT 2025, IC2NC 2025, and the 7th International Research Conference, Sri Lanka. The publications focus on Machine Learning, 5G Architectures, AI-Based Data Protection, and Brain Tumor Classification. (Scopus Indexed).

Dr.R N Devendra Kumar

Books

[B1] D. Devedrakumar, Nodal Analysis Made Easy – DC Circuits. ISBN: 978-81-995427-1-6, 2025. The book provides a simplified approach for understanding nodal analysis techniques in DC circuits.

[B2] D. Devedrakumar, Nodal Analysis Made Easy – AC Circuits. ISBN: 978-81-995427-4-7, 2025. The book focuses on practical methods for analyzing AC electrical circuits using nodal techniques.

[B3] D. Devedrakumar, Quantum Computing: The Next Frontier in Computer Science. ISBN: 978-81-992230-4-2, 2025. The publication introduces concepts, principles, and emerging applications of quantum computing.

Conference Publications

[C1] S. Ohmshankar et al., “Real-Time Phishing Site Detection Using Transformer Ensemble Models,” presented at the 4th International Conference on Applied AI, 2025. The study proposes transformer ensemble techniques for phishing website detection and cybersecurity enhancement.

Journal Publications

[J1] S. Leelavathy et al., “Harnessing Fuzzy Logic to Quantify Diagnostic Uncertainty in Medical Decision Support,” Fuzzy Information and Engineering, vol. 17, no. 4, 2025. The article investigates fuzzy logic-based approaches for handling uncertainty in healthcare decision support systems.

Dr. S Karthikeyeni

Conference Publications

[C1] Karthikeyeni et al., “Enhancing Scalability in Smart Cities VANET: A Modularity-Based Approach for Optimized Cluster Head Selection,” presented at the 2nd International World Congress on Smart Computing (WCSC 2025), Babu Banarasi Das University, Lucknow, India, Feb. 2025. The work addresses scalability challenges in vehicular ad hoc networks for smart city applications.

[C2] Karthikeyeni et al., “Early Lung Cancer Diagnosis Using a Nadam-Optimized CNN Architecture on Medical Images,” presented at the 8th International Conference on Communication and Computation Technology (ICCCT 2026), Goa, India, Feb. 2026. The paper proposes a deep learning framework for early-stage lung cancer diagnosis.

[C3] Karthikeyeni et al., “Optimized Convolutional Neural Network for Early and Accurate Heart Disease Diagnosis,” presented at the IEEE 15th International Conference on Communication Systems and Network Technologies (CSNT 2026), Saudi Arabia, Apr. 2026. The work focuses on AI-driven cardiovascular disease prediction.

Journal Publications

[J1] Karthikeyeni et al., “Self-Healing Distributed Computing Architecture for Fault-Tolerant Applications,” 2025. The publication proposes a self-healing architecture for improving reliability and fault tolerance in distributed computing environments.

Dr. N Sivabalan

Books

[B1] S. Sivabalan, Quantum Computing Models, Algorithms and Applications. Yatiraja Scholarly Press, 2025. The book provides insights into quantum algorithms, computational models, and emerging applications in computing.

Conference Publications

[C1] S. Sivabalan et al., “Mind Ease+: AI-Based Mental Health Support System,” IEEE International Conference, 2025. The paper presents an AI-driven framework for mental health assessment and support. (Scopus Indexed).

Patents

[P1] S. Sivabalan, IoT Enabled Remote Structural Health Monitoring Device, Design Patent No. 474568-001, 2025. The innovation enables remote monitoring of structural conditions using IoT technologies.

Dr.M Kalpana Devi

Book Chapters

[BC1] Kalpanadevi, “The Ransomware Resurgence: A Critical Analysis of Healthcare Sector Vulnerabilities,” in BookBytes International Publications, 2025. The chapter examines cybersecurity threats and ransomware attacks targeting healthcare systems.

Conference Publications

[C1] Kalpanadevi et al., “Contextual Weighted Voting Ensemble for Enhanced Customer Behavior Prediction Using Dynamic Attention-Based Model Fusion,” presented at the IEEE International Conference on Computing Methodologies and Communication (ICCMC 2025). The work proposes an ensemble learning framework for customer behavior analytics. (Scopus Indexed).

Journal Publications

[J1] Kalpanadevi et al., “Machine Learning Approach for Predicting Altitude Sickness Susceptibility Through Personalised Pre-Acclimatisation Protocols,” *Journal of Environmental Protection and Ecology*, vol. 26, no. 2, pp. 473–483, 2025. The study explores machine learning methods for personalized healthcare prediction.

[J2] Kalpanadevi et al., “Enhancing Sales Forecasting Accuracy Through Machine Learning Models in Business Analytics,” in *Proceedings of Data Analytics and Management (ICDAM 2025)*, Springer, vol. 9, 2025. The work focuses on predictive analytics for business forecasting applications.

Mr.J Justin Jayaraj

Book Chapters

[BC1] J. Jayaraj, “Breast Cancer Segmentation Using Deep Learning U-Net,” Springer Nature Switzerland, 2025. The chapter presents deep learning-based medical image segmentation techniques for breast cancer diagnosis.

Ms. N Sanjana

Books / Book Chapters

[BC1] Sanjana authored scholarly works on Explainable AI and Industry 4.0, VR Therapy for Mental Disorders, AR/VR in Healthcare, Quantum Computing in Machine Learning, AIoT in Agriculture, and Smart IoT and Mental Health, highlighting emerging technologies and their industrial applications.

Conference Publications

[C1] Sanjana et al., “Solar Still – Sound Agitation,” presented at ASME IMECE India 2025. The research investigates innovative sustainable energy and water purification methodologies.

Patents

[P1] Leaf Disease Detection Robot, Patent Filed, 2025.

[P2] Camera-Integrated Mudguard, Patent Filed, 2025.

Ms. R Abinaya

Conference Publications

[C1] Abinaya et al., “Machine Learning Based Web Classifier for ECG Arrhythmia Detection,” International Conference, 2025. The work applies machine learning techniques for cardiac arrhythmia diagnosis.

[C2] Abinaya et al., “Cardio Aid: A Real-Time Predictive and Interpretative Platform for Cardiac Care Using Machine Learning,” International Conference, 2025. The paper presents an intelligent platform for cardiac care and predictive healthcare analytics.

Ms. S. Revathi

Journal Publications

[J1] S. Revathi, “Enhanced Short-Term Traffic Flow Forecasting Using a Meteorological Spatio-Temporal Transformer with Multi-Head Attention and Whale Optimization,” Scientific Reports, 2025. The study proposes a transformer-based deep learning framework for intelligent traffic forecasting and smart transportation systems.

Ms V. Preetha

Book Chapters

[BC1] Preetha, “Quantum Computing and Industry Transformation,” 2025. The publication discusses the transformative impact of quantum computing on industrial innovation and future computing paradigms.

Mr. Gokulraj

Book Chapters

[BC1] Gokulraj, “Deep Learning-Based U-Net Enhancement for Breast Cancer Segmentation,” Springer Book Lecture Series, 2025 (Scopus Indexed). The chapter focuses on improving medical image segmentation using deep learning techniques.

Conference Publications

[C1] Gokulraj et al., “Person Detection Using Proposed YOLOv8 in Crime Hotspot Cities,” IEEE Xplore International Conference, 2025 (Scopus Indexed). The work proposes a computer vision framework for intelligent surveillance.

[C2] Gokulraj et al., “Efficient YOLOv8 Model for Licence, Helmet and Person Detection,” IEEE Xplore International Conference, 2025 (Scopus Indexed). The paper focuses on traffic monitoring and public safety using deep learning-based object detection.