Faculty Profile



Dr. K. Suresh Kumar, M.Tech., Ph.D.
Professor, HoD – IT and Associate Dean (SCOFT)

HIGHLIGHTS:

- Number of Journal Publications: **81**
- H-Index: **Scopus – 9 and Google Scholar – 18**
- Patents Published: **7**
- Patents Granted: **8**

PROFESSIONAL LINKS:

- Scopus ID: 57220400605
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=57220400605
- Google Scholar Link: https://scholar.google.co.in/citations?hl=en&user=5SOH3egAAAAJ=en&user=JKT9ePMAAAAJ
- Anna University Faculty ID: 2677981975
- AICTE Faculty ID: 1-462395781
- Anna University Supervisor ID: 4140067
- LinkedIn: https://www.linkedin.com/in/dr-suresh-kumar-krishnamoorthy-600053112/

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: **22 Years**
- Industrial Experience: **2 Years**

INTERNATIONAL EXPOSURE:

- Completed **IUCEE** (Indo Universal Collaboration for Engineering Education) on International Engineering Education Certification Program **with Distinction (Score 95.85)**
- Visited **Taylor's University, Malaysia** and **MDIS, Singapore**, and presented paper in an International Conference.
- Visited **De Montfort University, Dubai** and presented a paper in an International Conference, and also acted as **session chair**.

AREA OF SPECIALIZATION:

- Cybersecurity
- Image Processing

- Artificial Intelligence
- Cloud Computing

Ph.D. GUIDING: TOTAL – 8

- Full Time Scholars: **2**
- Part Time Scholars: **6**

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

- Applied project proposal entitled **AI-Enabled Climate-Smart Agriculture for Sustainable Livelihood Enhancement of Scheduled Caste Farmers in Thiruppathur Aspirational Block, Sivagangai District, Tamil Nadu.** Under DST Mission सह-SANKALP**, Amount Rs. 2,79,50,000/-** in July 2026.
- Project Proposal On "**Science, Technology and Innovation STI Hub for Sustainable Livelihood Enhancement of Scheduled Caste Communities through Millet Valorization, Dairy Value Addition, and Herbal Product Enterprises in Jawadhu Hills, Tiruvannamalai District, Tamil Nadu**" Submitted to Division: Science for Equity Empowerment and Development **(SEED)** Programme/Scheme: STI Hub for SC Community Amount in **Rs. 1,20,55,000/-** in July 2026.
- Received **Rs. 5,00,000/-** from **IEEE EPICS** Scheme for the project titled "BreatheEase: Adaptive Oxygen Management and Monitoring System for Lung Failure Patients" in January 2026.
- Organized FDP on Cyber Security sponsored by **IIT Bombay**, conducted under the National Mission on Education through ICT by **MHRD**. Fund received: **Rs. 1,45,000/-**
- Organized 3 Days Entrepreneur Awareness Camp funded by **ISTE**. Fund received: **Rs. 20,000/-**
- Received **Rs. 10,000/-** from **Tamil Nadu State Council for Technical Education** for Student Project
- **Anna University** Sponsored FDTP on Mobile Communication. Fund received: **Rs. 80,000/-**

JOURNALS PUBLISHED:

SCI / SCIE Journals (25)

1. N.V. Kumar, **S.K. Krishnamoorthy**, V. Ramaswamy, S. Ponnada, J. Kotti, and S. Nagarajan, "A Novel LTXOR with GLCM Features and Parallel Efficient Convolutional Neural Network for Focal Liver Lesion Detection and Classification Using CEUS Video Clip," *Iranian Journal of Science and Technology - Transactions of Electrical Engineering*, 2026, doi: 10.1007/s40998-026-01127-x.
2. G. Karthi, **K.S. Kumar**, L.K. Singh, and P. Murugesan, "Diabetic foot ulcer detection using a Dynamic Slimmable Network with Pyramid Attention Network-based Human Memory Optimization Algorithm," *International Journal of Diabetes in Developing Countries*, 2026, doi: 10.1007/s13410-026-01642-x.
3. V. Cheemalapati, **S.K. Krishnamoorthy**, S. Nagarajan, and V. Natarajan, "Kidney stone detection using a novel ShuffleV2 residual network on ultrasonic image," *International Journal for Multiscale Computational Engineering*, vol. 24, no. 1, pp. 79–111, 2026, doi: 10.1615/IntJMultCompEng.2026060354.
4. **K.S. Kumar**, R. Kavitha, H.M. Al-Jawahry, and E. Muniyandy, "Recommendation system for sociology theory construction using hyperbolic random snow geese graph coupled attention network," *Quality and Quantity*, vol. 60, no. 2, pp. 5607–5639, 2026, doi: 10.1007/s11135-025-02482-3. (SSCI)
5. S. Nagarajan, V. Siruvoru, **S.K. Krishnamoorthy**, V. Ramaswamy, S. Ponnada, and J. Kotti, "Red Blood Cell Deformability Using PyramidNet with Gannet Puffer Fish Optimization Using Microscopy Image," *International Journal of Computational Methods*, vol. 23, no. 3, Art. no. 2550055, 2026, doi: 10.1142/S0219876225500550.

6. S. Kotagiri, **S.K. Krishnamoorthy**, V.A. Mahadevan, and S. Nagarajan, "Shuffle fuzzy attention network for glaucoma detection from fundus images," *Computers and Electrical Engineering*, vol. 133, Art. no. 111024, 2026, doi: 10.1016/j.compeleceng.2026.111024.
7. I. Sargunan, **S.K. Krishnamoorthy**, K. Govindharaju, and V. Cheemalapati, "TopK-KiU-Net and squeeze residual fraction network for kidney tumor segmentation and detection," *Biomedical Signal Processing and Control*, vol. 113, Art. no. 109116, 2026, doi: 10.1016/j.bspc.2025.109116.
8. J. Kotti, S. Nagarajan, V. Siruvoru, **S.K. Krishnamoorthy**, V. Ramaswamy, and S. Ponnada, "XSP-Net: Xception spinal network for left ventricular failure classification using cardiac MRI image," *Journal of Mechanics in Medicine and Biology*, vol. 26, no. 1, Art. no. 2550037, 2026, doi: 10.1142/S021951942550037X.
9. V.A. Devi, P.V.B. Reddy, S. Ponnada, and **K.S. Kumar**, "Cascade stacked autoencoder neural network for intrusion detection in CAN-FD vehicular network," *Knowledge-Based Systems*, vol. 329, Art. no. 114301, 2025, doi: 10.1016/j.knosys.2025.114301.
10. R. Raja, **K.S. Kumar**, T. Marimuthu, and P.V. Prasad, "Optimal power utilization in hybrid microgrid systems with IoT-based battery-sustained energy management using RSA-PFGAN approach," *Journal of Energy Storage*, vol. 105, Art. no. 114632, 2025, doi: 10.1016/j.est.2024.114632.
11. V. Ramaswamy, S. Ponnada, J. Kotti, S. Nagarajan, N. Vijay Kumar, and **S.K. Krishnamoorthy**, "Pyramid SpinalNet-based nerve structure segmentation and classification using ultrasound nerve image," *Knowledge-Based Systems*, vol. 330, Art. no. 114705, 2025, doi: 10.1016/j.knosys.2025.114705.
12. J. Jia, S.S. Kumarasamy, K.S. Pokkuluri, **K.S. Kumar**, T.P. Priyanka, and F. Wang, "A Robust Authentication and Trust Detection with Privacy Preservation of Data for Fog Computing in VANET Using Adaptive Deep Neural Network," *IEEE Access*, vol. 12, pp. 161227–161246, 2024, doi: 10.1109/ACCESS.2024.3486811.
13. **K. Suresh Kumar**, J.A. Alzubi, N.M. Sarhan, E.M. Awwad, V. Kandasamy, and G. Ali, "A Secure and Efficient BlockChain and Distributed Ledger Technology-Based Optimal Resource Management in Digital Twin Beyond 5G Networks Using Hybrid Energy Valley and Levy Flight Distributer Optimization Algorithm," *IEEE Access*, vol. 12, pp. 110331–110352, 2024, doi: 10.1109/ACCESS.2024.3435847.
14. S. Balakrishnan, **K.S. Kumar**, J. Janet, D.V. Babu, and C.P. Lora, "An emergence of technological aids using machine learning algorithms to curtail the mounting manifestation of dyspraxia," *Multimedia Tools and Applications*, vol. 83, no. 9, pp. 26089–26105, 2024, doi: 10.1007/s11042-023-16464-w.
15. S. N, **S.K. K**, B. Maram, and V. S, "Fractional WSD: Fractional war strategy dingo optimization with unified segmentation for detection of skin cancer," *Biomedical Signal Processing and Control*, vol. 87, Art. no. 105346, 2024, doi: 10.1016/j.bspc.2023.105346.
16. B. Maram, **K. Suresh Kumar**, and V. Gampala, "Multispectral and hyperspectral image fusion: a systematic analysis and review with the state of art techniques," *International Journal of Bio-Inspired Computation*, vol. 23, no. 4, pp. 214–224, 2024, doi: 10.1504/IJBIC.2024.139277.
17. G.S.R. Emil Selvan, T. Daniya, J.P. Ananth, and **K. Suresh Kumar**, "Network Intrusion Detection and Mitigation Using Hybrid Optimization Integrated Deep Q Network," *Cybernetics and Systems*, vol. 55, no. 1, pp. 107–123, 2024, doi: 10.1080/01969722.2022.2088450.
18. G. Nirmala Priya, **K. Suresh Kumar**, N. Suganthi, and S. Muppidi, "Squirrel Henry Gas Solubility Optimization driven Deep Maxout Network with multi-texture feature descriptors for digital image forgery detection," *Concurrency and Computation: Practice and Experience*, vol. 36, no. 8, Art. no. e7965, 2024, doi: 10.1002/cpe.7965.
19. P.G. Om Prakash, **K. Suresh Kumar**, B. Maram, and C. Priya, "Deep Fuzzy Clustering and Deep Residual Network for Prediction of Web Pages from Weblog Data with Fractional Order Based Ranking," *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, vol. 31, no. 3, pp. 413–436, 2023, doi: 10.1142/S0218488523500216.

20. J.G.R. Elwin, **K.S. Kumar**, J.P. Ananth, and R.R. Kumar, "Entropy Weighted and Kernalized Power K-Means Clustering Based Lesion Segmentation and Optimized Deep Learning for Diabetic Retinopathy Detection," *International Journal on Artificial Intelligence Tools*, vol. 32, no. 1, Art. no. 2250044, 2023, doi: 10.1142/S0218213022500440.
21. **K.S. Kumar**, N. Suganthi, S. Muppidi, and B.S. Kumar, "FSPBO-DQN: SeGAN based segmentation and Fractional Student Psychology Optimization enabled Deep Q Network for skin cancer detection in IoT applications," *Artificial Intelligence in Medicine*, vol. 129, Art. no. 102299, 2022, doi: 10.1016/j.artmed.2022.102299.
22. S. Balakrishnan, **K. Suresh Kumar**, L. Ramanathan, and S.K. Muthusundar, "IoT for Health Monitoring System Based on Machine Learning Algorithm," *Wireless Personal Communications*, vol. 124, no. 1, pp. 189–205, 2022, doi: 10.1007/s11277-021-09335-w.
23. **K. Suresh Kumar**, S. Balakrishnan, and J. Janet, "A cloud-based prototype for the monitoring and predicting of data in precision agriculture based on internet of everything," *Journal of Ambient Intelligence and Humanized Computing*, vol. 12, no. 9, pp. 8719–8730, 2021, doi: 10.1007/s12652-020-02632-5.
24. R. Cristin, **K.S. Kumar**, and P. Anbhazhagan, "Severity Level Classification of Brain Tumor based on MRI Images using Fractional-Chicken Swarm Optimization Algorithm," *The Computer Journal*, vol. 64, no. 10, pp. 1514–1530, 2021, doi: 10.1093/comjnl/bxab057.
25. **S.K. Krishnamoorthy** and S. Thankappan, "A novel method to authenticate in website using CAPTCHA-based validation," *Security and Communication Networks*, vol. 9, no. 18, pp. 5934–5942, 2016, doi: 10.1002/sec.1747.

Scopus Journals (9)

1. **S.K. Krishnamoorthy**, M. Muthupandian, V. Srinadh, and D. Thavasilingam, "Dense network and quantum key techniques: a novel approach to identity verification and authentication," *International Journal of System Assurance Engineering and Management*, 2026, doi: 10.1007/s13198-026-03201-3.
2. **S.K. Krishnamoorthi**, G. Karthi, M. Radhika, A.R. Rathinam, A.R. Raju, L. Pinjarkar, and C. Srinivasan, "Advancing airway management for ventilation optimization in critical healthcare with cloud computing and deep learning," *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 37, no. 2, pp. 1053–1063, 2025, doi: 10.11591/ijeecs.v37.i2.pp1053-1063.
3. M. Geetha, R. Velumani, **K.S. Kumar**, and T. Daniya, "Shuffled shepherd social political optimized deep learning for rice leaf disease classification and severity percentage prediction," *Biomedical Engineering - Applications, Basis and Communications*, vol. 36, no. 4, Art. no. 2450013, 2024, doi: 10.4015/S1016237224500133.
4. M. Geetha, **K.S. Kumar**, Ch. Vidyadhari, and R. Ganeshan, "Infgraph: Influential Researcher and Cited Research Analysis Using Citation Network," *International Journal of Decision Support System Technology*, vol. 14, no. 1, 2022, doi: 10.4018/IJDSST.311065.
5. A. Venkataramana, **K. Suresh Kumar**, N. Suganthi, and R. Rajeswari, "Prediction of Brinjal Plant Disease Using Support Vector Machine and Convolutional Neural Network Algorithm Based on Deep Learning," *Journal of Mobile Multimedia*, vol. 18, no. 3, pp. 771–788, 2022, doi: 10.13052/jmm1550-4646.18315.
6. R. Majji, R. Rajeswari, **K.S. Kumar**, and R. Cristin, "A novel forgery detection in face images using enhanced convolutional neural network," *Advances in Mathematics: Scientific Journal*, vol. 9, no. 10, pp. 8303–8311, 2020, doi: 10.37418/amsj.9.10.59.
7. T. Daniya, M. Geetha, and **K.S. Kumar**, "Classification and regression trees with gini index," *Advances in Mathematics: Scientific Journal*, vol. 9, no. 10, pp. 8237–8247, 2020, doi: 10.37418/amsj.9.10.53.
8. **K. Suresh Kumar** and T. Sasikala, "Image shape based mutual authentication to enhance the web security," *Journal of Computational and Theoretical Nanoscience*, vol. 14, no. 6, pp. 2844–2852, 2017, doi: 10.1166/jctn.2017.6585.

9. **K. Suresh Kumar** and T. Sasikala, "A technique for web security using mutual authentication and clicking-cropping based image CAPTCHA technology," *International Review on Computers and Software*, vol. 9, no. 1, pp. 110–118, 2014, doi: 10.15866/irecos.v9i1.1037.

Conferences and Book Chapters (46)

1. P. Swarna Lakshmi and **K. Suresh Kumar**, "A Permissioned Distributed Ledger Framework for Secure Academic Credential Management Using Zero-Knowledge Proofs," *Lecture Notes in Networks and Systems*, vol. 1450, pp. 439–447, 2026, doi: 10.1007/978-981-96-7289-9_35.
2. J.G. Gini, S. Selvi, G. Soniya Priyatharsini, M. Sasi Kumar, S. Sengottaian, and **K. Suresh Kumar**, "Breast Cancer Detection and Classification Using Attention-Based Multiscale Image Analysis and AI," *Lecture Notes in Networks and Systems*, vol. 1452, pp. 377–388, 2026, doi: 10.1007/978-981-96-7292-9_31.
3. K.S. Kavitha Kumari, L. Chitra, K. Boopathy, P. Poornima, and **K. Suresh Kumar**, "Design and Analysis of a Single-Phase 29-Level Switched-Capacitor Boost Multilevel Inverter," *Lecture Notes in Networks and Systems*, vol. 1452, pp. 425–434, 2026, doi: 10.1007/978-981-96-7292-9_35.
4. T.R. Saravanan, A. Sheryl Oliver, E. Poongothai, M. Saravanapandian, and **K. Suresh Kumar**, "Innovations in Submarine Rock and Mine Detection in Exploring Submerged Hazards," *Lecture Notes in Networks and Systems*, vol. 1452, pp. 435–445, 2026, doi: 10.1007/978-981-96-7292-9_36.
5. A. Adlin Arul, R. Vinifa, J. Anish Kumar, and **K. Suresh Kumar**, "Prediction of Shaft Bent Faults in Industrial Drives Using Adaptive Wavelet Transform and Gradient Boosting Regression," *Lecture Notes in Networks and Systems*, vol. 1452, pp. 413–423, 2026, doi: 10.1007/978-981-96-7292-9_34.
6. P.V. Gopirajan, T. Pradeep, R. Charan, and **K. Suresh Kumar**, "Advanced Crop Prediction and Collaborative Agri-Investment Platform," *Lecture Notes in Networks and Systems*, vol. 1378, pp. 295–309, 2025, doi: 10.1007/978-981-96-5781-0_25.
7. B. Vijayalakshmi, S.B. Mohan, M. Premkumar, M. Sasi Kumar, and **K. Suresh Kumar**, "An Intelligent Epidural Space Locator with a Medication Injector," *Lecture Notes in Networks and Systems*, vol. 1378, pp. 385–398, 2025, doi: 10.1007/978-981-96-5781-0_32.
8. R. Sudharsanan, A. Sanjay, P. Raghul, D. Hayden Joseph, P.V. Gopirajan, and **K. Suresh Kumar**, "Comparative Analysis of YOLOv8 and Legacy Object Detection Algorithms for Real-Time Helmet Detection," *Lecture Notes in Networks and Systems*, vol. 1379, pp. 193–207, 2025, doi: 10.1007/978-981-96-5784-1_16.
9. S.P. Panimalar, G. Abinaya, and **K. Suresh Kumar**, "Comparison of Gaussian Filter, Adaptive Median Filter & Convolution Neural Network to Detect Brain Tumor from CT-Scan Image," *Lecture Notes in Networks and Systems*, vol. 1379, pp. 497–516, 2025, doi: 10.1007/978-981-96-5784-1_40.
10. **K. Suresh Kumar**, C.R. Thilahar, and M.V. Anand, "Energy-Efficient Routing Algorithm (EERA) Design for Heterogeneous IoT Environment," *Lecture Notes in Networks and Systems*, vol. 1378, pp. 425–438, 2025, doi: 10.1007/978-981-96-5781-0_35.
11. C. Suresh, N. Sujitha, P.K. Mani, S. Sengottaian, and **K.S. Kumar**, "Enhancing the Performance of Smart E-Bike Using Intelligent Systems," *Lecture Notes in Networks and Systems*, vol. 1378, pp. 439–451, 2025, doi: 10.1007/978-981-96-5781-0_36.
12. B. Dwarakanath, S. Sai Ganesh, M. Mathesh, N. Goutham Ram, and **K. Suresh Kumar**, "Investigating Customer Segmentation Dynamics via Market Basket Analysis: An Extensive Exploration of Market Insights," *Lecture Notes in Networks and Systems*, vol. 1379, pp. 221–242, 2025, doi: 10.1007/978-981-96-5784-1_18.
13. P. Jose, V.A. Asha, T. Vinu, F. SahayaReema, P.V. Gopirajan, and **K.S. Kumar**, "Optimizing Deep Learning Models for Knee Structure Detection: A Comparative Study of U-Net and Its Variants," *Lecture Notes in Networks and Systems*, vol. 1379, pp. 169–179, 2025, doi: 10.1007/978-981-96-5784-1_14.

14. K. Niha, P.V. Gopirajan, and **K.S. Kumar**, "Revolutionizing Potato Farming: A Machine Learning Approach to Advanced Disease Detection and Classification," *Lecture Notes in Networks and Systems*, vol. 1379, pp. 181–191, 2025, doi: 10.1007/978-981-96-5784-1_15.
15. K.S. Kavitha Kumari, L. Chitra, K. Boopathy, P. Poornima, and **K. Suresh Kumar**, "ANN-Based Interleaved Synchronous Rectifier for Electric Vehicle Charging," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 287–295, 2024, doi: 10.1007/978-981-97-5146-4_25.
16. **K. Suresh Kumar** and A. Swathi, "Detecting and Eliminating Negative Chaos Creating Tweets Using Crisis-Causing Tweet Elimination (CCTE) Algorithm," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 189–198, 2024, doi: 10.1007/978-981-97-5146-4_17.
17. **K. Suresh Kumar** and M. Raghul, "E-Commerce Product Review Analysis Using Machine Learning Techniques," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 143–152, 2024, doi: 10.1007/978-981-97-5146-4_13.
18. T.R. Saravanan, N. Antony Sophia, N. Kanimozhi, and **K. Suresh Kumar**, "Enhanced Keyword Immediacy Exploration in Composite Statistics Grids to Progress in Networks," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 297–307, 2024, doi: 10.1007/978-981-97-5146-4_26.
19. P. Hemavathy, M.S. Priya, P. Sundaravadivel, E.S. Vinothkumar, and **K.S. Kumar**, "Harnessing AI Mining Methodologies to Anticipate the Probability of Gestational Diabetes Mellitus Occurrence," *Lecture Notes in Networks and Systems*, vol. 1037, pp. 295–303, 2024, doi: 10.1007/978-981-97-3991-2_25.
20. **K. Suresh Kumar** and K. Divya Bharathi, "Integrating Handwritten Digit Recognition with Learning Management Systems for Evaluated Answer Scripts," *Lecture Notes in Networks and Systems*, vol. 1037, pp. 179–189, 2024, doi: 10.1007/978-981-97-3991-2_16.
21. M. Moorthi, V. Nivaskumar, C. Senthilkumar, M. Arun, K. Shankar, K.I.A. James, M. Sushmitha, and **K. Sureshkumar**, "Membrane Chip Technology Aids in the Early Detection of Blood Cancer Using Biomarkers," *Lecture Notes in Networks and Systems*, vol. 1037, pp. 273–283, 2024, doi: 10.1007/978-981-97-3991-2_23.
22. A.G. Nath and **K.S. Kumar**, "Realistic Avatar Control Through Video-Driven Animation for Augmented Reality," *IFIP Advances in Information and Communication Technology*, vol. 717, pp. 306–314, 2024, doi: 10.1007/978-3-031-69982-5_23.
23. **K. Suresh Kumar** and S. Christika, "Road Sign Recon: A Traffic Sign Scanner Web Site with CNN Integration," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 87–100, 2024, doi: 10.1007/978-981-97-5146-4_9.
24. M. Moorthi, T. Lakshmi, K. Immanuvel Arokia James, S. Joshua Kumaresan, A.J. Albert, L.C. Yong, and **K.S. Kumar**, "Smart Glove with Real Time Patient Monitor System," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 153–163, 2024, doi: 10.1007/978-981-97-5146-4_14.
25. G. Abinaya, **K. Suresh Kumar**, and S. Kayalvizhi, "Survey Paper on Road Rage and Proposed Solutions Related to Traffic Management," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 101–118, 2024, doi: 10.1007/978-981-97-5146-4_10.
26. B. Deepa, T.A. Annie, G. Keerthiga, **K. Suresh Kumar**, P. Subha, and R. Prabavathi, "Utilizing Convolutional Neural Networks and Ridge Regression for Alzheimer's Disease Detection," *Lecture Notes in Networks and Systems*, vol. 1007, pp. 345–353, 2024, doi: 10.1007/978-981-97-5146-4_30.
27. A. Thilagavathy, D. Naveen Raju, S. Priyanka, G. RamBalaji, P.V. Gopirajan, and **K. Sureshkumar**, "Actual Facial Mask Recognition Utilizing YOLOv3 and Regions with Convolutional Neural Networks," *Lecture Notes in Networks and Systems*, vol. 681, pp. 81–93, 2023, doi: 10.1007/978-981-99-1909-3_8.
28. **K.S. Kumar**, S. Aravindhan, K. Pavankumar, and T. Veeramuthuselvan, "Autodubs: Translating and Dubbing Videos," *Lecture Notes in Networks and Systems*, vol. 682, pp. 53–60, 2023, doi: 10.1007/978-981-99-1946-8_6.

29. S. Kumaran, D. Suresh Kumar, A. Saravanan, and **K. Suresh Kumar**, "Crop Pest Control using IoT Real-Time Monitoring and Intervention," in *Proc. Int. Conf. Sustainable Communication Networks and Application (ICSCNA 2023)*, pp. 1552–1557, 2023, doi: 10.1109/ICSCNA58489.2023.10370176.
30. M. Malathi, P. Sinthia, M.R.K. Priya, S. Kavitha, and **K.S. Kumar**, "Design of Automatic Clearance System for Emergency Transport and Abused Vehicle Recognition," *Lecture Notes in Networks and Systems*, vol. 681, pp. 109–117, 2023, doi: 10.1007/978-981-99-1909-3_10.
31. T.K.R. Agita, M. Arun, K.I.A. James, S. Arthi, P. Somasundari, M. Moorthi, and **K. Sureshkumar**, "Detection of Disease in Liver Image Using Deep Learning Technique," *Lecture Notes in Networks and Systems*, vol. 681, pp. 285–298, 2023, doi: 10.1007/978-981-99-1909-3_26.
32. S. Kavitha, M. Malathi, P. Sinthia, R.K. Priya, and **K. Suresh Kumar**, "Early Identification of Plant Diseases by Image Processing Using Integrated Development Environment," *Lecture Notes in Networks and Systems*, vol. 681, pp. 139–152, 2023, doi: 10.1007/978-981-99-1909-3_13.
33. A.H. Malini, S. Mohith, B.S. Prasad, and K.S.C. Kumar, "Efficiency and Computation of WiMAX OFDM using Millimeter Wave and Smart Antennas," in *Proc. 5th Int. Conf. Smart Systems and Inventive Technology (ICSSIT 2023)*, 2023, doi: 10.1109/ICSSIT55814.2023.10060978.
34. P. Sinthia, R. Karpaga Priya, S. Kavitha, M. Malathi, and **K. Suresh Kumar**, "IoT-Based Smart Pill Box and Voice Alert System," *Lecture Notes in Networks and Systems*, vol. 681, pp. 129–138, 2023, doi: 10.1007/978-981-99-1909-3_12.
35. M. Kanchana, P.V. Gopirajan, **K. Sureshkumar**, R. Sudharsanan, and N. Suganthi, "IoT-Based Water Quality Monitoring and Detection System," *Lecture Notes in Networks and Systems*, vol. 681, pp. 35–45, 2023, doi: 10.1007/978-981-99-1909-3_4.
36. **K.S. Kumar**, S. Pavithra, K.P. Subiksha, and V.G. Kavya, "Multi-parameter Sensor-Based Automation Farming," *Lecture Notes in Networks and Systems*, vol. 681, pp. 267–274, 2023, doi: 10.1007/978-981-99-1909-3_24.
37. R. Karpaga Priya, S. Kavitha, M. Malathi, P. Sinthia, and **K. Suresh Kumar**, "Single-Phase Bi-Directional AC/DC Converters for Fast DC Bus Voltage Controller," *Lecture Notes in Networks and Systems*, vol. 682, pp. 33–44, 2023, doi: 10.1007/978-981-99-1946-8_4.
38. S. Kumaran, D.S. Kumar, A. Saravanan, and **K.S. Kumar**, "The Energy-Balanced Routing Algorithm for Wireless Sensor Network," in *Proc. 4th Int. Conf. Smart Electronics and Communication (ICOSEC 2023)*, pp. 540–545, 2023, doi: 10.1109/ICOSEC58147.2023.10276034.
39. **K.S. Kumar**, T. Aishwarya, K.N.K.A.A. Sekkappan, and V.S. Nandinisree, "An Innovative Approach to Predict Refractive Error of a Human Eye using Machine Learning," in *Proc. 6th Int. Conf. Electronics, Communication and Aerospace Technology (ICECA 2022)*, pp. 939–942, 2022, doi: 10.1109/ICECA55336.2022.10009639.
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41. S. Sasikumar, D. Naveen Raju, P.V. Gopirajan, **K. Sureshkumar**, and R. Pradeep, "Deep Learning and Internet of Things (IoT) Based Irrigation System for Cultivation of Paddy Crop," *Lecture Notes in Networks and Systems*, vol. 434, pp. 319–327, 2022, doi: 10.1007/978-981-19-1122-4_35.
42. N. Suganthi and **K. Suresh Kumar**, "Efficient Spectrum Allocation in Wireless Networks Using Channel Aggregation Fragmentation with Reservation Channels," *Lecture Notes on Data Engineering and Communications Technologies*, vol. 91, pp. 647–663, 2022, doi: 10.1007/978-981-16-6285-0_52. (Book chapter)
43. S. Balakrishnan, **K. Suresh Kumar**, M. Balasubramanian, and Y. Rajkumar, "Opinion Mining for Breast Cancer Disease Using Apriori and K-Modes Clustering Algorithm," *Lecture Notes in Networks and Systems*, vol. 434, pp. 43–51, 2022, doi: 10.1007/978-981-19-1122-4_6.

44. S. Merugula, **K.S. Kumar**, S. Muppidi, and C. Vidyadhari, "Stop Phishing: Master Anti-Phishing Techniques," in *Proc. IEEE North Karnataka Subsection Flagship Int. Conf. (NKCon 2022)*, 2022, doi: 10.1109/NKCon56289.2022.10126569.
45. V. Rajmohan, N. Shankar, and **K. Suresh Kumar**, "Analysis of a High Competent Feedforward FFT Architecture," *Advances in Intelligent Systems and Computing*, vol. 1187, pp. 359–364, 2021, doi: 10.1007/978-981-15-6014-9_41.
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PATENTS PUBLISHED/GRANTED:

Published Indian Patents (7)

- A method and system for controlling deforestation September 2019
- Design a personal Assistance system for dyspraxias-affected patients November 2019
- Image CAPTCHA Cropping using Symbols March 2020
- IoT-based Sailing Vessel Stem Bulb Mounted Sail Course Recorder May 2023
- A Machine Learning Algorithm for Detecting Driver Drowsiness May 2023
- Designing A Smart Livestock Monitoring Using Wireless Networks and Data Analytics FEB 2024
- Creating An Automated Pest Detection and Control System Using Machine Learning and Robotics FEB 2024

Indian Design Patent Grant

- Blockchain-enabled Device for Enhancing Computer Network Safety APR 2023
- IoT-Based Wearable Medical Monitoring Devices APR 2023
- Sun Tracking Solar Panel May 2023

International Patent Grant

- Received patent grant for eight years on "Continuous Energy Supply To Household Appliances Through Uninterrupted Power Meter" in **Australia**, **Application No – 2020102346**. September 2020
- Received eight-year patent grant on "ELECTRIC VEHICLE CHARGE MANAGEMENT AND MONITORING SYSTEM BASED ON IOT" in **Australia**, Application No –. September 2020

COURSES CERTIFIED:

International Certification from Dell EMC

- **Cloud Infrastructure Services** from Dell EMC Issued Feb 2014 Credential ID S69NBHMYNEVE51G9

International Certification in Coursera

- **Python Data Structures** from University of Michigan
- **Blockchain Basics** from University at Buffalo
- **Introduction to the Internet of Things and Embedded Systems** from University of California, Irvine
- **Fundamentals of Network Communication** from University of Colorado System
- **Programming for Everybody (Getting Started with Python)** from the University of Michigan
- **Cyber Attack Countermeasures** from New York University Issued Jul 2024
- **Transacting on the Blockchain** from Coursera

International Certification from IBM

- **Introduction to Data Science**
- **Bitcoin 101**
- **Python for Data Science**
- **IBM Cloud Essentials**
- **R Programming (R 101)**
- **Hadoop Foundations - Level 1H**
- **Machine Learning with Python - Level 1**
- **IBM Blockchain Essentials V2**

ACHIEVEMENTS AND AWARDS:

- Received the **best teacher award 5 times** in college.
- **Research Excellence Award- 2024** from INSc (Institute of Scholars) for Publication.
- **Guru Sironmani Award** from PAAI, New Delhi in Jan 2023.
- **Global Teacher Award** from AKS Education Awards, Gurugram, NCR, INDIA 2019.
- **Best Senior Faculty** from DKIRF in 2018.
- **Outstanding Contribution on Teacher Award** from NFED in 2012.

SPECIAL SESSIONS DELIVERED:

- Served as a **keynote speaker** and delivered a special session on **"Emerging Challenges in Threats and Vulnerabilities"** at the UNITEAS 24 Conference held in Indore.
- Delivered a **keynote address** and special session on **"Challenges in Cloud Security"** at the 24 Conference held in Jaipur.
- Presented a **keynote session** on **"Cybersecurity in Healthcare and WBSN"** at the National Conference organized by SRM University.
- Presented a session on "ML in Cybersecurity: Enhancing Threat Detection and Prevention" during Faculty Development Program at Panimalar Engineering College.
- Delivered **more than 15 special sessions** in various events like FDPs, Seminars and Conferences

PROFESSIONAL MEMBERSHIPS:

- **CSI Life Member** – Membership ID: 01178175
- **IAENG Life Member** – Membership ID: 163009
- **INSc Life Member** – Membership ID: 20248REA74
- **ACM Associate Member** – Membership ID: 3304933
- **IEEE Professional Member** – Membership ID: 94220531

OTHER DETAILS:

Books Published

- **"Cloud Computing"**, Charulatha Publication, 2024, ISBN No: 978-93-5577-782-9
- **"Advanced Data Structures and Algorithms using C++"**, Scientific International Publishing House, 2021. ISBN No: 978-93-92992-34-6.
- **"Computer Programming"** Vinayaka Publisher 2008
- **"Computer Practice"** Vinayaka Publisher 2008
- **"Computer Practice Laboratory"** Vinayaka Publisher 2009

Reviewer

- Reviewer Security and Privacy **(SCI indexed, Scopus)** Annexure
- Reviewer Journal of Ambient Intelligence and Humanized Computing **(SCI)**
- Reviewer International Journal of Information Security and Privacy **(SCI indexed, Scopus)**
- Reviewer Internet Technology Letters **(SCI indexed, Scopus)**
- Reviewer European Journal of Training and Development **(Scopus)**
- Reviewer International Journal of Computer Techniques.
- Reviewer Journal of Network and Computer Applications
- Reviewer Interdisciplinary Transactions on Cloud Computing, IoT, and Big Data
- Reviewer International Journal of Innovative Technology and Creative Engineering
- Reviewer Signal, Image and Video Processing
- Reviewer Cluster Computing
- Reviewer Discover Computing
- Reviewer Discover Artificial Intelligence
- Reviewer Scientific Reports
- Reviewer Earth Science Informatics
- Reviewer Peer-to-Peer Networking and Applications
- Acted as **Session Chair** in Various International Conferences (IEEE, Springer)

Resource Person

- Handled sessions on Various Topics in various Engineering College.