

Faculty Profile



Dr. N. Komal Kumar, M.E., Ph.D.
Assistant Professor (SG), AI&DS

HIGHLIGHTS:

- Number of Journal Publications: 50
- H-Index: 16
- Project Funding Received: NIL
- Patents Published: 6
- Patents Granted: 1

PROFESSIONAL LINKS:

- Scopus ID: 57212324259
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57212324259>
- Google Scholar ID: d0nwLr0AAAAJ
- Anna University Faculty ID: 321137
- AICTE Faculty ID: 1-7491266771
- Anna University Supervisor ID: NIL
- LinkedIn:

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 10 Years
- Industrial Experience: NIL

AREA OF SPECIALIZATION:

- Machine Learning
- Deep Learning

PATENTS PUBLISHED/GRANTED:

- Convolutional Neural Network Accelerator for Depthwise-Separable Architecture – Indian Patent (No. 202341084140 A)
- Smart Emotion Sensing Device – UK Design Patent (No. 6327952)- Granted
- IoT Uses a Machine Learning Approach Built on Block-Sparse Coding for Accurate Device-Free Localization – Indian Patent (No. 202441017146 A)

- Method and System for Task Scheduling in a Cloud-Fog Network Operating in Space via Computing Offloading – Indian Patent (No. 202441034120 A)
- Non-Dominated Sorting Genetic Algorithm II (NSGA-II) Based Automated Task Scheduling System for Fog-Cloud Computing Environments – Indian Patent (No. 202441061851)
- A Data Governance and Security Management System for Distributed Data Architecture – Indian Patent (No. 202421064087)
- A System and Method for Detecting and Mitigating Vehicle Horn Misuse in Real-Time – Indian Patent (No. 202441095830)

COURSES CERTIFIED:

- Completed Learn Data Science Basics from Udemy, 11 NOV 2024.
- Completed Complete Machine Learning Course - Learn From Scratch from Udemy, 08 JUL 2024.
- Completed A Beginner Guide's to Learn Machine Learning from Udemy, 02 APR 2024.
- Completed Complete Data Science Course: Beginner to Advance from Udemy, 28 FEB 2024.
- Completed Data Science with python from simplilearn skillup, 5 OCT 2023.
- Completed Introduction to Data Analytics from simplilearn skillup, 17 NOV 2023.
- Completed Google Analytics Certification from Google, 4 OCT 2023.
- Completed Complete Machine Learning Bootcamp from Udemy, 4 SEP 2023.

NPTEL CERTIFICATIONS

- The Joy of Computing using Python (Jul-Oct, 2023)
- Programming in Java (Jan-Apr, 2024)
- Research Methodology (Jul-Sep, 2024)

ACHIEVEMENTS AND AWARDS:

- The Top 2023 cited paper award- IAES International Journal of Artificial Intelligence- Scopus Indexed- Q2 Journal- No. 20985/IJAI/A/2/2024

SPECIAL SESSIONS DELIVERED:

- Delivered a session on “Entrepreneurship for a sustainable Future: Aligning Startups with SDG's” at Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Chennai on 15.02.2025.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Presented a paper titled “Optimizing Skin Cancer Detection using the MobileNet Deep Learning Model: A Lightweight and Efficient Approach” in 3rd International Conference on Artificial Intelligence and Machine Learning Applications (AIMLA), on 29th & 30th Apr 2025 at K. S. Rangasamy College of Technology, Tamil Nadu, India.
- Presented a paper titled “Early Detection of Scalp Psoriasis using Deep Learning” in 15th International Conference on Science & Innovative Engineering, on 26th & 27th Apr 2025 at Prince Dr. K. Vasudevan College of Engineering & Technology, Chennai, India.
- Presented a paper titled “Predicting Employee Attrition: A Comparative Analysis of Machine Learning Models Using the IBM Human Resource Analytics Dataset” in International

Conference on Machine Learning and Data Engineering (ICMLDE-2024, 28th-29th Dec 2024), UPES, India.

- Presented a paper titled “Advancements in Face Detection: A Comparative Analysis of Classifiers and Feature Extraction Methods” in 2024 IEEE International Conference on Intelligent Signal Processing and Effective Communication Technologies (INSPECT-2024, 7-8th Dec 2024), ABV-IIITM Gwalior, India.
- Presented a paper titled “Advancing Brain Tumor Detection: A Fusion of Image Augmentation and Machine Learning” in 2024 IEEE International Conference on Intelligent Signal Processing and Effective Communication Technologies (INSPECT-2024, 7-8th Dec 2024), ABV-IIITM Gwalior, India.
- Presented a paper titled “Real-Time Eye-Tracking Mouse Control System using OpenCV and Facial Landmark Detection” in 2024 IEEE International Conference on Intelligent Signal Processing and Effective Communication Technologies (INSPECT-2024, 7-8th Dec 2024), ABV-IIITM Gwalior, India.
- Presented a paper titled “Enhancing Alzheimer's Disease Detection: A Comparative Study of Deep Learning Techniques with Transfer Learning and Custom CNN Models” in 2nd International Conference on Computational Intelligence and Network Systems (CINS 2024 28-29 Nov 2024), BITS Pilani, Dubai Campus.
- Presented a paper titled “Enhanced Alzheimer's Disease Prediction through Advanced Imaging: A Study of Machine Learning and Deep Learning Approaches” in 5th International Conference on Smart Electronics and Communication (ICOSEC 18-20 Sep 2024), Kongunadu College of Engineering, Tamil Nadu.
- Presented a paper titled “Improving Loan approval Prediction with K-fold Cross Validation and Hyperparameter Optimization” in 3rd International Conference on Deep Sciences for Computing and Communications (IconDeepCOM-2024 24-25 April 2024), SRMIST, Chennai.
- Presented a paper titled “Enhancing COVID-19 Prediction: Optimized Random Forest Classifier with Feature Selection” in IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2024 14-16 Mar 2024), ABV-IIITM, Gwalior.
- Presented a paper titled “Improving Cardiovascular Disease Prediction: Machine Learning and Cross-Fold Validation” in IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2024 14-16 Mar 2024), ABV-IIITM, Gwalior.

WORKSHOPS/FDP

- Participated in Five days FDP on “AI-Driven Full Stacks Innovation: From Microservices to Intelligent Automation and Cloud Scalability”, by AICTE Training and Learning (ATAL) Academy from 20-25 Jan 2025 at SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY.
- Participated in Five days virtual FDP on “Applied AI: Practical Implementations”, under TechSaksham Program led by Microsoft India & SAP India from 18-22 Nov 2024.
- Participated in Five days virtual FDP on “Methods for Improving Higher Education Teaching Quality Using Outcome Based Education, Pedagogical Approaches and NEP 2020 (OBENEP24)”, at Haldia Institute of Technology, Haldia, West Bengal, India on 22-26, July, 2024.
- Participated in Seven days Online FDP on “Essential Skills for Professional Development in Higher Education”, by Star International Foundation for Research and Education, Tamil Nadu, India on 01-07, July, 2024.

- Participated in Five days Virtual FDP on “AI for Educators”, at Institute of Public Enterprise (IPE), Hyderabad on 20-24, May, 2024.
- Participated in Two days Virtual FDP on “Research Methodology and Project Work Guidance”, at Government Degree College- Korutla in Association with Institute of Public Enterprise (IPE), Hyderabad on 12th & 13th, March, 2024.
- Participated in Five days Virtual FDP on “Unlocking Industry Insights in Data Science”, at Madanapalle Institute of Technology & Science, 12-16, Feb 2024.
- Participated in Five days Virtual FDP on “Research- The Journey from Inception to Publishing” at Dhanraj Baid Jain College, 05-09, Feb 2024.

OTHER DETAILS:

REVIEWER

- Cogent Engineering, Taylor & Francis- Scopus & WoS Indexed
- Geocarto International, Taylor & Francis- Scopus & WoS Indexed
- Connection Science, Taylor & Francis- Scopus & WoS Indexed
- BMJ Open, British Medical Association- Scopus & WoS Indexed
- Cybernetics and Systems, Taylor & Francis- Scopus & WoS Indexed
- MedComm - Future Medicine, Wiley- Scopus & WoS Indexed
- Heliyon, Elsevier- Scopus & WoS Indexed
- iScience, Elsevier- Scopus & WoS Indexed
- International Journal of Research and Reports in Gynaecology-WoS Indexed
- BMC Medical Informatics and Decision Making, Springer- Scopus & WoS Indexed
- International Journal of Public Health- SCIE Indexed
- International Journal of Cardiology Cardiovascular Risk and Prevention- SCIE Indexed
- Current Gene Therapy- Bentham Science Publishers Scopus & SCIE Indexed
- Automatika: Journal for Control, Measurement, Electronics, Computing and Communications (Taylor & Francis)- Scopus & SCIE Indexed
- Qeios
- Asian Journal of Medical Principles and Clinical Practice
- IAES Journal of Artificial Intelligence (IJ-AI)- Scopus Indexed
- Bulletin of Electrical Engineering and Informatics (BEEI), Institute of Advanced Engineering and Science- Scopus Indexed