Faculty Profile



Kiruthika Appavu, M.E.
Assistant Professor
Department of Computer Science and Engineering
Saveetha Engineering College, Chennai, Tamil Nadu

HIGHLIGHTS:

- Number of Journal Publications: 3 (including 1 under review)
- H-Index: 1
- Project Funding Received: Nil
- Patents Published: 2 (filed, 2025)
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: 60769750800
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=60769750800
- Google Scholar ID: TBLbwLwAAAAJ
- LinkedIn: linkedin.com/in/kiruthika-appavu-a2b264227
- GitHub: https://github.com/AppavuKiruthika
- Anna University Faculty ID: 2762301999
- AICTE Faculty ID: 1-47891081919

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: June 2026 – Present, Assistant Professor, Saveetha Engineering College, Chennai
- Industrial Experience: System Engineer, Infosys Pvt Ltd, Bengaluru (August 2021 – August 2022) — cloud and middleware technologies in an enterprise IT environment

INTERNATIONAL EXPOSURE:

- M.E. in Industrial and Systems Engineering, Gyeongsang National University, Jinju, South Korea (2023–2025), under the GKS (Global Korea Scholarship)
- Presented research at the 22nd Triennial Congress of the International Ergonomics Association, Jeju, South Korea (2024)
- Presented at the Fall 2024 and Spring 2025 Conferences of the Korean Institute of Industrial Engineers, Seoul and Jeju, South Korea
- TOPIK 3 (2023) and TOPIK 4 (2025) certifications — Korean language proficiency

AREA OF SPECIALIZATION:

- Machine Learning and Deep Learning (YOLO and CNN-based object detection, classification, segmentation)
- Computer Vision — Thermal Imaging for Disaster Response
- AI-based Disaster Resilience and Search & Rescue Systems
- Natural Language Processing and Sentiment Analysis
- Data Structures, Algorithms and Object-Oriented Programming

Ph.Ds AWARDED WITH DETAILS:

S.No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time
—	Nil	—	—	—

Ph.Ds GUIDING:

- **Full Time Scholars:** Nil
- **Part Time Scholars:** Nil

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

- Research Group in AI and Robot-based Rapid Search and Rescue Operation in Disaster Sites
- Rapid Relief Activity Support System on Disaster Situations Using Intelligent Information Technologies – WP2: Site Digitalization of Disaster Situations Using Multiple UAVs

PATENTS PUBLISHED/GRANTED:

- Appavu, K., Hong, J., Karuppanasamy, K., & Moon, S. (2025). Thermal imaging-based earthquake victim detection and rescue prioritization system. (Filed)
- Karuppanasamy, K., Han, J., Hong, J., Appavu, K., & Moon, S. (2025). Device and method for SNS-based disaster-related information filtering. (Filed)

COURSES CERTIFIED:

- 4th Class Unmanned Multicopter (Drone Pilot) License — Korea Transportation Safety Authority (2024)
- TOPIK 3 & TOPIK 4 — Test of Proficiency in Korean (2023, 2025)

ACHIEVEMENTS AND AWARDS:

- GKS Scholarship (Global Korea Scholarship), South Korea, 2022
- Top Performer, TCS National Qualifier Test, 2021
- Student Ambassador, Nandha Infotech, Tamil Nadu, 2020–21
- Student Secretary, Department of CSE, Nandha College of Technology, Anna University, 2019–21

PUBLICATIONS:

Journal Articles (UG):

- Mohanapriya, D., Appavu, K., Megavardhini, A., Nandhini, K., & Devayani, P. (2021). Social Distancing Detection using Deep Learning Model. International Journal of Science Development & Research.

International Conference Proceedings (PG):

- Appavu, K., Subramani, N., & Lee, S.C. (2024). Helpful Prediction of User-Generated Reviews using Machine Learning Algorithm with TF-IDF and Sentiment Analysis for Alexa Reviews. 22nd Triennial Congress of the International Ergonomics Association, Jeju, South Korea.

Domestic Conference Proceedings (PG):

- Appavu, K., Hong, J., Karuppanasamy, K., & Moon, S. (2024). Prioritization of Search/Restoring Operations in Disaster Sites Using Computer Vision. 2024 Fall Conference of Korean Institute of Industrial Engineers, Seoul.
- Appavu, K., Hong, J., Karuppanasamy, K., & Moon, S. (2025). Victim Rescue Prioritization in Collapsed Buildings using Thermal Image Analysis via Computer Vision. 2025 Spring Conference of Korean Institute of Industrial Engineers, Jeju.
- Karuppanasamy, K., Han, J., Appavu, K., & Moon, S. (2025). LLM-based Automated SNS Refinement for Indirect Estimation of Disaster Situation. 2025 Spring Conference of Korean Institute of Industrial Engineers, Jeju.

Journal Papers (PG):

- Appavu, K., Hong, J., Karuppanasamy, K., & Moon, S. (2025). Thermal Vision-based Victim Detection and Rescue Prioritization in Collapsed Buildings Using Posture and Temperature Information. (KBS Journal – under review)
- Karuppanasamy, K., Appavu, K., Han, J., Lee, S., Kim, Y., & Moon, S. (2025). AI-Based Social Media Analytics for Disaster Resilience: A Unified Framework for Reliable Information Extraction. (KSCE Journal)

SPECIAL SESSIONS DELIVERED / WORKSHOPS & FDPs ORGANIZED:

- Not applicable / to be updated (recently joined academia in June 2026)

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- 22nd Triennial Congress of the International Ergonomics Association, Jeju, South Korea (2024)
- 2024 Fall Conference of Korean Institute of Industrial Engineers, Seoul, South Korea
- 2025 Spring Conference of Korean Institute of Industrial Engineers, Jeju, South Korea

PROFESSIONAL MEMBERSHIPS:

- Not specified / to be updated

OTHER DETAILS (If any):

- Research Projects: Research Group in AI and Robot-based Rapid Search and Rescue Operation in Disaster Sites; Rapid Relief Activity Support System on Disaster Situations Using Intelligent Information Technologies (WP2: Site Digitalization of Disaster Situations Using Multiple UAVs)
- Prior Industry Experience: System Engineer, Infosys Pvt Ltd, Bengaluru (2021–2022) — cloud and middleware technologies
- Education: M.E. – Industrial and Systems Engineering (CGPA 4.14/4.5), Gyeongsang National University, Jinju, South Korea (2023–2025); B.E. – Computer Science and Engineering (CGPA 7.96/10), Nandha College of Technology, Anna University (2017–2021)
- Technical Skills: Python, C, C++, Java, HTML/CSS, PyTorch, TensorFlow, OpenCV, Scikit-learn
- Address: No. 1599/B, 61st Street, TNHB, Avadi, Chennai, Tamil Nadu, India