KRISTU JAYANTI
(DEEMED TO BE UNIVERSITY)
Under Section 3 of UGC Act 1956
A CMI INSTITUTION | BENGALURU | INDIA

Centre for Research & Development

Research Supervisor (Guide) Profiles

Discipline of Supervision: Computer Science/Computer Applications/Data Science

Dr. Ranjitha M
Associate Professor
Department of Computer Science
School of Computational & Physical Sciences

Areas of Specialisation:
Image Processing and Pattern Recognition; Medical Image Analysis, Diagnostic Imaging, Computer-Aided Detection.

Dr. Ranjitha M is an Associate Professor in the Department of Computer Science at Kristu Jayanti (Deemed-to-be University), Bengaluru. She specializes in Image Processing, Medical Image Analysis, core areas of Computer Science, and Artificial Intelligence. Holding a Ph.D. in Computer Science, her research integrates advanced computational techniques to address real-world challenges in healthcare, environmental sustainability, and intelligent systems. Her expertise spans cutting-edge domains such as Generative AI, Deep Learning, and Large Language Models (LLMs), with applications in intelligent image analysis, natural language processing, and decision support systems. She has published extensively in reputed journals including Springer, IEEE, and Scopus-indexed publications, and has received accolades such as the Best Paper Award at the Elsevier International Conference. As Principal Investigator, She has led multiple research projects and guided impactful postgraduate research. Notably, she spearheaded the Jayantian in Motion (JIM) project—an autonomous robot designed to promote sustainability on campus. She has also served as a Ph.D. examiner and is currently an editor and reviewer for various journals. Her ongoing research explores AI in fisheries, fog computing, metaverse ecosystems, and blockchain-integrated smart farming. A professional member of ACM and IAENG, she has also served as faculty sponsor for ACM-W. He regularly contributes as a Keynote Speaker, Session Chair, and Resource Person at national and international forums. Her mentoring philosophy blends innovation, interdisciplinary research, and practical relevance, ensuring that her work creates meaningful societal impact.

Selected Publications:

1. Bharathi, V., and **Ranjitha, M**. (2025). An Optimized Deep Learning Method for Automatic Translator for Ancient Hieroglyphic Language from Scanned Images to English Text. SN Computer Science, 6(6). https://doi.org/10.1007/s42979-025-04165-0

2. **Ranjitha, M**., Divya, M. O., Devi, K. A., Menon, S., and Mishra, A. (2024). Sustainable Artificial Intelligence Techniques to Predict the Effect of Circadian Rhythms to Improve Socio Economic Well-Being of Farmers by Enhancing Crop Yields. Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-63569-4_39

3. Divya, M. O., Vijaya, M. S., and **Ranjitha, M**. (2025). Fetal Cardiac Anomaly Detection Models Using Pattern Classification and FetalEcho_V01 Dataset. Springer Nature Singapore. https://doi.org/10.1007/978-981-96-3372-2_30