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: Data Science

Dr. Ayshwarya B
Assistant Professor
Department of Computer Science (PG)
School of Computational & Physical Sciences

Areas of Specialisation:
Machine Learning and Artificial Intelligence, Data Analytics, and Data Science, Healthcare Informatics and Medical Data Analysis,

Dr. Ayshwarya B is an accomplished academic researcher and Assistant Professor with over 17 years of experience in the field of Computer Science. Her expertise lies in data analytics, machine learning, and the application of artificial intelligence in healthcare. Her research primarily focuses on developing intelligent predictive models for early disease detection, with a special emphasis on lung cancer. She employs advanced techniques such as neural networks and optimization algorithms, including Backpropagation and the Blue Whale Optimizer, to enhance prediction accuracy and support effective clinical decision-making. Her work highlights key areas such as feature selection, risk factor analysis, and model optimization. She has extensive experience in designing and implementing end-to-end data pipelines, encompassing data extraction, pre-processing, modelling, and evaluation. She has published over 35 research papers in reputed national and international journals and conferences, and has contributed book chapters in emerging domains such as AI and IoT-based healthcare. She is also the author of technical books on Web Programming and Java. In addition to her research contributions, she has served as a journal reviewer, convener of national conferences, contributor to curriculum development, and resource person for faculty development programs. She holds certifications in AWS Cloud and Scrum, demonstrating her commitment to continuous learning and staying aligned with industry practices.

Selected Publications:

1. Deepa, B. G., Lokesh, C. K., Umamaheswari, D., **Ayshwarya, B**., Yethish, P. V., & Suhaas, K. P. (2026). An enhanced deep learning framework for DeepFake detection using EfficientNet-B3 comparative evaluation of deep and machine learning techniques. Discover Computing, 29(1). https://doi.org/10.1007/s10791-025-09890-x

2. **Ayshwarya, B**. (2025). 265Chapter 13 A technical perspective on generative adversarial reinforcement learning. In Quantum Generative Adversarial Networks (pp. 265–276). De Gruyter. https://doi.org/10.1515/9783111354934-013

3. Mohamed, M. V., Nainwal, A., **Ayshwarya, B**, Kumar, H. S., Rabadiya, D., & Taqui, S. N. (2024). Optimized Siamese Humboldt Squid Attention Network Architecture for Cyber-Attack Detection in IoT 4.0. In 2024 4th International Conference on Sustainable Expert Systems (ICSES) (pp. 197–203). IEEE. 2024 4th International Conference on Sustainable Expert Systems (ICSES). https://doi.org/10.1109/icses63445.2024.10763149