



Centre for Research & Development

Research Supervisor (Guide) Profiles

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



Dr. Arati Mohapatro

Associate Professor
Department of Computational Studies
School of Computational and Physical Sciences

Areas of Specialisation:

Machine Learning, Artificial Intelligence, NLP, Deep Learning, Cyber Security

Dr. Arati Mohapatro is a researcher and academician with research interests spanning Artificial Intelligence, Machine Learning, Healthcare Informatics, Explainable AI, and Intelligent Decision Support Systems. Her research focuses on applying AI and data-driven techniques to address real-world challenges in healthcare, agriculture, security, and smart systems. Her work includes research on multimodal biometric authentication, healthcare decision support systems, hospital and healthcare-provider ranking, dengue detection, aquaponics monitoring, and explainable deep learning for chest X-ray classification. She has contributed to research publications in international conferences, journals, and edited volumes, including IEEE and Springer publications. Her recent research includes “Multi Label Chest X-Ray Classification using DenseNet with Explainable AI”, published in the Proceedings of ICCMC 2026, and research on multimodal biometric authentication. Her scholarly contributions also include studies applying rough set, formal concept analysis, fuzzy AHP, and Generative AI techniques. Her current research interests emphasize trustworthy and explainable AI, healthcare prediction, fairness-aware machine learning, and the integration of AI with intelligent decision-support frameworks. She is committed to interdisciplinary research that translates computational techniques into practical and socially relevant solutions.

Selected Publications:

1. Padmavathy, L., Nithya, S., Bindhu, M. C., Anandaram, R. H., Mahalakshmi, S., & **Mohapatro, A.** (2026). Multi label chest X-ray classification using DenseNet with explainable AI. Proceedings of the 9th International Conference on Computing Methodologies and Communication (ICCMC 2026), 1568–1572. <https://doi.org/10.1109/ICCMC69250.2026.11624705>
2. Tiwari, R. S., Das, T. K., Durgashri, G., & **Mohapatro, A.** (2024). A smart locking system based on multimodal biometrics authentication. 2024 5th International Conference on Circuits, Control, Communication and Computing (I4C), 571–576. <https://doi.org/10.1109/I4C62240.2024.10748442>
3. Joshi, K., Priya, P., Kaushik, V., Anandaram, H., **Mohapatra, A.**, & Kumar, A. (2023). Adoption of Internet of Things for smart monitoring of aquaponics. 2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT). <https://doi.org/10.1109/ICCCNT56998.2023.10306800>