



Centre for Research & Development

Research Supervisor (Guide) Profiles

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



Dr. Josephine Sathya M A

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

Areas of Specialisation:

Speech & Audio Processing, Natural Language Processing, Machine Learning and Deep Learning, Generative AI & Intelligent Systems, Human-Computer Interaction & Assistive Technologies

Dr. M. A. Josephine Sathya is an Associate Professor in the Department of Computational Studies at Kristu Jayanti (Deemed to be University), Bengaluru, with over 18 years of experience in higher education. She specializes in Computer Science, Artificial Intelligence, Machine Learning, Data Analytics, Cybersecurity, and Computer Networks. A passionate academician, researcher, and author, she has made significant scholarly contributions through 3 published books, 2 patents, 10 research journal publications, and over 40 national and international conference presentations. She has guided numerous student projects, contributed to curriculum development, and actively promotes research and innovation in emerging technologies. Dr. Josephine Sathya aims to simplify complex technical concepts, bridging the gap between theory and practice while inspiring students, educators, and researchers to embrace lifelong learning, innovation, and excellence in the field of computing.

Selected Publications:

1. Jayanthi, S., Kumari, T. S., Inturi, S., Nathan, B., **Sathya, M. A. J.**, & Karmakonda, K. (2026). Comparative Evaluation of Hyperparameter Tuning Methods in Crop Yield Prediction for Enhancing Food Security. *International Journal of Safety and Security Engineering*, 16(3), 479–489. <https://doi.org/10.18280/ijssse.160301>
2. Jayanthi, S., **Sathya, M. A. J.**, Nathan, B., Karmakonda, K., Laxmikanthan, M., & V, M. (2026). Machine Learning and Deep Learning Approaches for Crop Yield Prediction: A Comprehensive Analysis of Model Performance and Computational Efficiency. *Ingénierie Des Systèmes d'Informatio*, 31(3). <https://doi.org/10.18280/isi.310305>
3. Jayanthi, S., **Sathya, M. A. J.**, Nathan, B., Karmakonda, K., Laxmikanthan, M., & V, M. (2026). Interpretable Land-Use Classification Using ResNet18 and SmoothGradCAM++: A Study on the UC Merced Dataset. *Ingénierie Des Systèmes d'Informatio*, 31(2). <https://doi.org/10.18280/isi.310205>