

Faculty Profile

Name: Ms. Diksha Giri
Designation: Assistant Professor
Teaching Areas: Artificial Intelligence, Machine Learning,
Programming (C/C++, Python, Java),
Computational theory
Research Areas: Machine Learning, Biomedical Informatics,
Biomedical Data Analysis
Education: PhD – Pursuing, Sikkim Manipal Institute of
Technology
MCA- Sikkim Manipal Institute of
Technology -2017
BCA- SMIT -2015



Publications

1. Giri, D., Panigrahi, R., Bhandari, S. S., Pramanik, M., Bhoi, A. K., & de Albuquerque, V. H. C. (2025). A novel dynamic weighted prediction framework with stability-enhanced dynamic thresholding feature selection for neurodegenerative disease detection using gait features. *Journal of Big Data*, 12(1), 92.
2. Giri, D., Panigrahi, R., Bhandari, S. S., Hareesha, K. S., Pramanik, M., De Albuquerque, V. H. C., & Bhoi, A. K. (2025). Optimized Predictive Technique for Intelligent Classification (OPTIC): A Decision Tree Ensemble Approach for Neurodegenerative Disease Detection via Gait Pattern Analysis. *IEEE Access*.
3. Giri, D., Panigrahi, R., Bhandari, S. S., & Pramanik, M. (2025). Gait-Based Neurodegenerative Disease. *Innovations in Data Analytics: Selected Papers of ICIDA 2024, Volume 1, 1*, 429.
4. de Albuquerque, V. H. C., Bhandari, S. S., Bhoi, A. K., Giri, D., & Panigrahi, R. (2025). *Artificial Intelligence Strategies for Early Intervention in Neurodegeneration*. Elsevier Science Publishing Company Incorporated.
5. Giri, D., Panigrahi, R., Bhandari, S. S., Pramanik, M., & de Albuquerque, V. H. C. (2024). Gait-Based Neurodegenerative Disease Detection via Recurrent Neural Networks. *International Conference on Innovations in Data Analytics*, 429–444.
6. Syam, V., Safal, S., Bhutia, O., Singh, A. K., Giri, D., Bhandari, S. S., & Panigrahi, R. (2023). A non-invasive method for prediction of neurodegenerative diseases using gait signal features. *Procedia Computer Science*, 218, 1529–1541.

7. Giri, D., Borah, S., & Pradhan, R. (2018). Approaches and measures to detect wormhole attack in wireless sensor networks: a survey. In *Advances in Communication, Devices and Networking: Proceedings of ICCDN 2017* (pp. 855–864). Springer.
8. Giri, D., Panigrahi, R., Bhandari, S. S., & Pramanik, M. (2025). Hybrid Local Expert Mixture Classifier for Parkinson's Detection Using Gait-Based Features. *IEEE International Conference on Connected Intelligence for the Industrial Application (CI2A 2026)*