Jayashree Piri, Ph.D.

Designation : Assistant Professor

Department : Department of Computer Science & Engineering

(JOINED THE INSTITUTE IN 2023)

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RESEARCH INTERESTS
- ✓ Data Mining
- ✓ Medical Data Analysis
- ✓ Evolutionary Techniques
- ✓ Multi-Objective Optimization.
- ✓ Pattern Recognition

Academic Qualifications

Ph. D. (Computer Science), IIIT Bhubaneswar, India

ME (IT), Jadavpur University, Kolkata, India

B.Tech (IT), BPUT, Odisha, India

Teaching Experience

- ✓ 12 years

PUBLICATIONS

JOURNAL ARTICLES

[1] **Piri, Jayashree**, and Puspanjali Mohapatra. "An analytical study of modified multi-objective Harris Hawk Optimizer towards medical data feature selection." Computers in Biology and Medicine 135 (2021): 104558.

[2] **Piri, Jayashree**, et al. "A binary multi-objective chimp optimizer with dual archive for feature selection in the healthcare domain." IEEE Access 10 (2021): 1756-1774.

[3] **Piri, Jayashree**, et al. "Feature selection using artificial gorilla troop optimization for biomedical data: A case analysis with COVID-19 data." *Mathematics* 10.15 (2022): 2742.

[4] **Piri, Jayashree**, et al. "Mining and Interpretation of Critical Aspects of Infant Health Status Using Multi-Objective Evolutionary Feature Selection Approaches." *IEEE Access* 10 (2022): 32622-32638.

[5] **Piri, Jayashree**, Puspanjali Mohapatra, and Raghunath Dey. "Investigating association relationship between fetal heart rate parameters from cardiotocography employing multi-objective evolutionary algorithms." *International Journal of Information Technology* 14.4 (2022): 1923-1935.

[6] **Piri, Jayashree**, et al. "An Enhanced Binary Multiobjective Hybrid Filter-Wrapper Chimp Optimization Based Feature Selection Method for COVID-19 Patient Health Prediction." *IEEE Access* 10 (2022): 100376-100396.

[7] **Piri, Jayashree**, and Raghunath Dey. "Quantitative association rule mining using multi-objective particle swarm optimization." *Int J Sci Eng Res* 5.10 (2014): 155-161.

[8] **Piri, Jayashree**, et al. "Literature Review on Hybrid Evolutionary Approaches for Feature Selection." *Algorithms* 16.3 (2023): 167.

[9] Dey, Raghunath, Rakesh Chandra Balabantaray, and **Piri, Jayashree**. "Similarity evaluation among several benchmark handwritten latin digits datasets." *International Journal of Information Technology* 14.6 (2022): 2803-2813.

[10] **Piri, Jayashree**, et al. "Role of Hybrid Evolutionary Approaches for Feature Selection in Classification: A Review." *International Conference on Metaheuristics in Software Engineering and its Application*. Cham: Springer International Publishing, 2022.

[11] Dey, R., **Piri, Jayashree.,** Behera, D. K., & Khan, A. U. (2023). A time efficient offline handwritten character recognition using convolutional extreme learning machine. *The Imaging Science Journal*, 1-13.

[12] **Piri, Jayashree**. "Machine Learning for Predicting and Defining B2B Sales Success." *Journal of Engineering Sciences* 14.04 (2023).

[13] **Piri, Jayashree**. "Change detection in remotely-sensed images using associative classification."

[14] **Piri, Jayashree.** "Strategic Communication Enhancement through Private Language Modelling". Journal of Xidian University

CONFERENCE PAPERS

[1] **Piri, Jayashree**, Puspanjali Mohapatra, and Raghunath Dey. "Fetal health status classification using moga-cd based feature selection approach." 2020 IEEE international conference on electronics, computing and communication technologies (CONECCT). IEEE, 2020.

[2] **Piri, Jayashree**, Puspanjali Mohapatra, and Raghunath Dey. "Multi-objective ant lion optimization based feature retrieval methodology for investigation of fetal wellbeing." 2021 Third international conference on inventive research in computing applications (ICIRCA). IEEE, 2021.

[3] **Piri, Jayashree**, and Puspanjali Mohapatra. "Exploring fetal health status using an association based classification approach." 2019 International Conference on Information Technology (ICIT). IEEE, 2019.

[4] **Piri, Jayashree**, and Puspanjali Mohapatra. "Imbalanced cardiotocography data classification using re-sampling techniques." Proceedings of International Conference on Machine Intelligence and Data Science Applications: MIDAS 2020. Springer Singapore, 2021.

[5] Dey, Raghunath, Rakesh Chandra Balabantaray, and **Jayashree Piri**. "A robust handwritten digit recognition system based on sliding window with edit distance." 2020 IEEE international conference on electronics, computing and communication technologies (CONECCT). IEEE, 2020.

[6] Dey, R., Balabantaray, R. C., **Piri, Jayashree**., & Singh, D. (2021, September). Offline natural scene character recognition using vgg16 neural networks. In 2021 Third International Conference on Inventive Research in Computing Applications (ICIRCA) (pp. 946-951). IEEE.

[7] Kuanr, Madhusree, Puspanjali Mohapatra, and **Piri, Jayashree**. "Health recommender system for cervical cancer prognosis in women." 2021 6th international conference on inventive computation technologies (ICICT). IEEE, 2021.

[8] **Piri, Jayashree**, et al. "Role of Hybrid Evolutionary Approaches for Feature Selection in Classification: A Review." International Conference on Metaheuristics in Software Engineering and its Application. Cham: Springer International Publishing, 2022.

[9] **Piri, Jayashree**, et al. "Security and Privacy Threats of IoT Devices: A Short Review." *2023 4th International Conference on Signal Processing and Communication (ICSPC)*. IEEE, 2023.

[10] Shrimankar, R., Kuanr, M., **Piri, Jayashree.**, & Panda, N. (2022, August). Software Defect Prediction: A Comparative Analysis of Machine Learning Techniques. In 2022 International Conference on Machine Learning, Computer Systems and Security (MLCSS) (pp. 38-47). IEEE.

[11] Raj, P. B. A. S**., Piri, Jayashree**., Reddy, S., & Eluri, S. B. (2023, May). An Analytical Study of Regression Techniques towards H-1B Visa Prediction. In 2023 7th International Conference on Intelligent Computing and Control Systems (ICICCS) (pp. 871-876). IEEE.

[12] Raj, P. B. A. S., **Piri, Jayashree.**, Eluri, S. B., & Reddy, S. (2023, February). Work Visa Analysis using Machine Learning Techniques. In 2023 Third International Conference on Artificial Intelligence and Smart Energy (ICAIS) (pp. 616-621). IEEE.

[13] Panigrahi, H. S., Mishra, I., Mishra, P., & **Piri, Jayashree.** (2024, March). A Novel Multi-Objective Model for Feature Selection in Cancer Data. In 2024 1st International Conference on Cognitive, Green and Ubiquitous Computing (IC-CGU) (pp. 1-6). IEEE.

PATENT

[1] Title : A multi-objective ant lion optimization based feature selection system.
Patentee Names **: Jayashree Piri**, Puspanjali Mohapatra
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