**Department of Advanced Computing**

**Publications – 2023-2024**

**Dr. Jayati Bhadra**

**Conference Publications**

1. Bhadra, J., Khanna, A. S., & Rashmi, S. Comparative Study for Optimizing Sales through Media, in IEEE international conference on advances in electronics, communication, computing and intelligent-I, dated 19-21 April, 2023, pp- 72-77.
2. Bhadra, J., Khanna, A. S., & Beuno, A. A Graph Neural Network Approach for Identification of Influencers and Micro-Influencers in a Social Network: Classifying influencers from non- influencers using GNN and GCN, in IEEE international conference on advances in electronics, communication, computing and intelligent-I, dated 19-21 April, 2023, pp- 66-71.
3. Bhadra, J., & DLima, A. L. Classification of Organic and Recyclable Waste for Sustainable Development using Resnet50 Model, in IEEE international conference on advances in electronics, communication, computing and intelligent-I, dated 19-21 April, 2023, pp – 78-83

**Dr. Sivakannan S**

**Conference Publications**

1. S. Subramani, S. Hari, K. Asha, V. Francis Densil Raj and L. P. Shaji, "Enhanced Short-Term Photovoltaic Power Prediction using a Hybrid Improved Whale Optimization Algorithm with XGBoost," 2024 Second International Conference on Smart Technologies for Power and Renewable Energy (SPECon), Ernakulam, India, 2024, pp. 1-4, doi: 10.1109/SPECon61254.2024.10537570.
2. S. Subramani, B. Sakthivel, N. T. George and T. A. Raj, "Citrus Leaf Disease Detection Using Various Deep Learning Architectures," 2023 International Conference on Sustainable Communication Networks and Application (ICSCNA), Theni, India, 2023, pp. 1425-1430, doi: 10.1109/ICSCNA58489.2023.10370298.
3. S. Subramani, A. Rarichan and S. H. Chaithra, "Utilizing deep learning techniques for detection of Polycystic Ovarian Syndrome using ovarian ultrasound image," 2023 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES), Chennai, India, 2023, pp. 1-7, doi: 10.1109/ICSES60034.2023.10465547.
4. John, S. M., Nagaraj, R. K. K., Lobo, C. C., & Subramani, S. A study on dog emotion recognition using deep learning techniques- AIP Conference Proceeding – 2023, Vol- 2790, No-1

**Journal Publications**

1. Sivakannan Subramani, Imran A F, Abhishek TTM, Sanjay Karthik M, Yaswanth J, Deep Learning Based Detection of Toxic Mushrooms in Karnataka, Procedia Computer Science, Volume 235, 2024, Pages 91-101, https://doi.org/10.1016/j.procs.2024.04.012.
2. Sivakannan. S, G. Keerthana, K. Gayathri, Jaishree Sundar, Medical Image Watermarking Technique Using IWT-BSVD, International Journal Of Advanced Intelligence Paradigms” Inderscience Publisher, 2023, Vol - 26, No - 3. <https://dx.doi.org/10.1504/IJAIP.2023.135859>
3. Sivakannan. S, G. Thirugnanam, Prabakaran. N And Bennilo Fernandes, Robust Medical Image Watermarking Technique Using Integer Wavelet Transform And Shearlet Transform With BSVD, “International Journal Of Advanced Intelligence Paradigms” Inderscience Publisher, 2024. , Vol-27, No-1. <https://dx.doi.org/10.1504/IJAIP.2024.136789>
4. Subramani, Sivakannan, Paavana Sathish, and Pushpalatha Subramani, MEMS based eating and drinking gesture spotting using machine learning techniques , Journal of statistics and management systems -2023, Vol-26, No-1, pp-134-145.
5. Subramani, S., Varshney, N., Anand, M. V., Soudagar, M. E. M., Al-Keridis, L. A., Upadhyay, T. K., & Rohini, K. Cardiovascular diseases prediction by machine learning incorporation with deep learning – Frontiers in Medicine – 2023, Vol-10, pp- 1-9

**Book Publication**

1. Xavier Savarimuthu, Sivakannan Subramani, Alex Noel Joseph Raj. (2023) Book Titled “Artificial Intelligence for Multimedia Information Processing: Tools and Applications”, Taylor & Francis Group, Switzerland. ISBN: 978-1-0325-2147-3
2. Computer Network & Network Security with ISBN number 9789356252653, Scientific International Publishing House, 2023

**Book Chapter Publications**

1. Sabarad, K., & Subramani, S. Revolutionizing concrete engineering: Predicting material properties with AI Insights in Artificial Intelligence for Multimedia Information Processing: Tools and Applications, 9781003405436, 2024, Taylor & Francis Group
2. Ashwa, L., Subramani, S., & Savarimuthu, S. X. ECG-Based diagnosis of sudden cardiac death using machine learning in Artificial Intelligence for Multimedia Information Processing: Tools and Applications, 9781003405436, 2024, Taylor & Francis Group.
3. Gupta, P., Betala, N., & Subramani, S. Comparative analysis of feature-based image stitching algorithms in Artificial Intelligence for Multimedia Information Processing: Tools and Applications, 9781003405436, 2024, Taylor & Francis Group.
4. Subramani, S., & Sharwin, A. MLACP 2.0: Utilizing machine learning to predict anticancer peptide activity from protein peptide patterns in Artificial Intelligence for Multimedia Information Processing: Tools and Applications, 9781003405436, 2024, Taylor & Francis Group.

**Mr. Francis Densil Raj V**

**Book Chapter Publication**

1. Francis, D. R. V., & Babu, L. A. Analyzing Aortic Stenosis Diagnosis and Medication with Artificial Intelligence. In *Artificial Intelligence for Multimedia Information Processing* (pp. 115-131). CRC Press, Taylor and Francis Group, USA.

**Conference Publications**

1. Vanditha Dsouza, Keerthana K. V, Francis Densil Raj V (June 2024). Atrial Fibrillation Classification: A Hybrid Approach Integrating Support Vector Machines and Feature Selection for Reduced Computational Complexity. In 3rd International Conference on Applied Artificial Intelligence and Computing (ICAAIC 2024), IEEE Xplore.
2. Shone Benny Parelanickal, John Jefferson, Francis Densil Raj V (2024, March). Detection of Colorectal Cancer from Histopathological Images Tissue Classification Using Deep Learning Techniques. In 2023 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES), IEEE Xplore.
3. Biju, I. S., & Nathan, G. M. (2024, February). Prediction of Cardiovascular Disease based on Lipid Profiles. In *2024 Second International Conference on Emerging Trends in Information Technology and Engineering (ICETITE)* (pp. 1-13). IEEE Xplore.
4. Lakshmi V. Aji; Jerry Raju Mathew; Prajjwal Patel; Francis Densil Raj, Scene text detection, recognition and language identification in AIP Proceeding, 2023, Vol- 2790, No-1

**Book Publications**

1. Mr. Manimuthu Ayyannan, Dr. Rakesh Verma, Mr. Francis Densil Raj V, Mr. Raghavendra K, Data Structures and Algorithmic Analysis using Python with ISBN numbers 978-93-5757-125-8, 2023, Scientific International Publishing House (SIPH)
2. Dr. Deepak A. Vidhate, Dr. R Rambabu, Dr. Pushpendra Kumar Verma, Mr. Francis Densil Raj V. Artificial Intelligence with ISBN numbers 978-93-5757-044-2, 2023, Scientific International Publishing House (SIPH)

**Patent Granted**

1. IOT PANEL FOR DOOR SECURITY SYSTEM, Design No: 388882-001, dated 09/02/2024.Serial No: 156278.

**Dr. Asha K**

**Conference Publications**

1. S. Subramani, S. Hari, K. Asha, V. Francis Densil Raj and L. P. Shaji, "Enhanced Short-Term Photovoltaic Power Prediction using a Hybrid Improved Whale Optimization Algorithm with XGBoost," *proceedings of Second International Conference on Smart Technologies for Power and Renewable Energy (SPECon)*, Ernakulam, India, 2024, pp. 1-4, doi: 10.1109/SPECon61254.2024.10537570.
2. Karan A, Aleena S, Asha, K., Novel and Comprehensive Performance Metric for Identifying Sports Talent in IPL T20 Cricket Match – 203, *proceedings of 3rd International Conference on Sports Engineering (ICSE 2023),* in collaboration with international Sports Association and Engineering UK, BITS Pilani, Pilani Campus, Rajasthan, 2nd November 2023.
3. Preethi S, Asha, K., Development of Energy Efficient Smart Home Automation Hub using IOT Sensors – 2023, *proceedings of 11th International Conference on Recent Challenges in Engineering and Technology (ICRCET 2023),* Institute of Engineering and Research Publications, Indonesia Society in association with Universit, Jakarta, Indonesia, 16th June 2023.

**Book Chapters Publications**

1. Asha, K & Raisa K., Detection of Fake News on Elections using Machine Learning Approach - 2024“, Routledge Taylor and Francis Group, DOI: 10.1201/9781003409519-3.
2. Joemon P, Jaini M, Asha, K., Bird Detection in Microlight Aircraft Strip Using YOLOv8 for Adventure Tourism – 2024,” Advances in Distributed Computing and Machine Learning”, Springer Singapore, DOI: 10.1007/978-981-97-3523-5.
3. Asha, K., Venkatesh, K. A. A Systematic Review with Recommendations on Intelligent Systems in Cognitive Healthcare in book titled “Intelligent Solutions for Cognitive Disorders” – 2024, with ISBN 9798369310908, IGI Global, USA.
4. Asha, K., George, K. A. Reducing Counterfeit Medicine through Blockchain in book titled “Blockchain Security for IOE: Security and Privacy Perspective – 2023, with ISBN 9781032431741, Routledge Taylor and Francis Group.
5. Jacob, C. B., & Asha, K. Real-estate Housing Market Analytics and Prediction using Bigdata for Post Pandemic era in book titled “Lecture Notes in Networks and Systems” – 2023, with ISBN 978-3-031-27523-4, Springer, Singapore
6. Mathew, J.A., Asha, K. A Prognostic Approach to Crime Analysis in book titled “Advanced in Machine Learning for Big Data Analysis – 2023, with ISSN 1868-4394, Springer Singapore

**Dr. Sanjay Dutta**

**Journal Publications**

1. Dutta, S., & Acharya, S. A Novel Approach to Solve Multi-Objective Fuzzy Stochastic Bi-level Programming using Genetic Algorithm in Operations Research Forum, Springer publication, Vol- 5, No-1 (2023), pp-1-11.
2. Dutta, S., Sahoo, B.C., Bhanavi, S. *et al.* Multi-Objective Fuzzy Probabilistic Programming Approach for Obtaining Optimum Crops Pattern with Water Replenishment. International Journal of Applied and Computational Mathematics, Vol - 10, No - 128 (2024), pp- 1-21. https://doi.org/10.1007/s40819-024-01756-y