



Annapurna Mishra, Ph.D.

Designation: Associate Professor

Department: Department of Electronics & communication Engg.
(JOINED THE INSTITUTE IN DEC 2010)

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RESEARCH INTERESTS

- ✓ Biometric Image Processing and Machine Learning
- ✓ Fingerprint Image Analysis
- ✓ Feature extraction of Real-time fingerprint data
- ✓ Classification of fingerprints into different classes using Machine Learning Approaches

Academic Qualifications

Ph.D in Information and Communication Technology, F. M University, Balasore
M. Tech in Electronics and Communication Engineering, BPUT, Odisha, India.
B. Tech in Electronics and Tele-communication Engineering, BPUT, Odisha, India. Specialisation: Image Processing

Teaching Experience/Industrial Experience/Research Experience

Teaching Experience : 17 years

Research Experience : 8 years

PUBLICATIONS

JOURNAL & CONFERENCES:

JOURNALS:

1. **A Mishra**, M Swain, B Dash," An approach to face recognition of 2-D Image using Eigen Faces and PCA, Signal and Image Processing, An *International Journal*, SIPIJ, Vol.3, Issue.2, 2012.
2. **A Mishra**, N Modi," Fingerprint Recognition using Local and Global Structures" *IJIREICE*, March, 2016.
3. **A Mishra**, Abhishek Mishra, Madhusmita Panda , " Fingerprint Classification and Matching using Self Organizing Feature Map", *International Journal of Modern Engineering Research*, April, 2016.
4. A. Ray, N Mohapatra, S Das and **A. Mishra**," Iris Recognition Using Gabor Filter and SURF Feature Detection Technique", *The IUP Journal of Information Technology*, June 2018.

5. **A. Mishra** and S. Dehuri. "Real-time online finger print image classification using adaptive hybrid techniques." *International Journal of Electrical and Computer Engineering* 9, no. 5 (2019): 4372.
6. **A. Mishra** and S. Dehuri. "A Novel Hybrid FLANN-PSO Technique for real Time Fingerprint Classification." *Medico-Legal Update* 19, no. 2 (2019): 740-746.
7. **A. Mishra** and S. Dehuri. and B. NRath. "4-Class Classification of Finger print Images Using Biogeography Based Optimization Techniques." *IAEME Publications*

CONFERENCES:

1. S. Rajguru, S. Satpathy, **A. Mishra** , 'Finger print Matching Using Alignment Match Algorithm", ICIT students Symposium, 2014.
2. **A. Mishra**, N Modi," Biometric Identification (Analysis based on Fingerprints and faces)", International Conference on Advanced Computing and Intelligent Engineering ICACIE-2016, Springer, Dec, 2016.
3. **A. Mishra**, S Dehuri, 'Fingerprint feature extraction and classification: An analysis based on Filter banks & Neural network.", National conference on Machine learning & Data science in Internet of Things, March, 2017.
4. **A. Mishra**, S Dehuri, 'An Experimental Study of Filter Bank Approach and Biogeography Based Optimized ANN in Fingerprint Classification", 3rd International Conference on Nanoelectronics, Circuits & Communication Systems (NCCS-2017), Nov, 2017.
5. **A. Mishra**, S Dehuri," Finger print Classification by filter bank approach using evolutionary ANN", International Conference on Cognitive Informatics & Soft Computing (CISC-2017), Dec, 2017.
6. A. Ray, N Mohapatra, S Das and **A. Mishra**," Iris Recognition Using Gabor Filter and SURF Feature Detection Technique", ICIT students Symposium, 2017.
7. **A. Mishra**, S. Dehuri, 'Fingerprint Classification by Filter Bank Approach using Biogeography based Optimized Functional Link ANN' International Conference on Applied Electromagnetics, Signal Processing and Communication (AESPC-2018), October 2018.
8. **A. Mishra**, S. Dehuri. and P. K. Mallick. "Classification of Real Time Noisy Fingerprint Images Using FLANN." In *International Conference on Biologically Inspired Techniques in Many-Criteria Decision Making*, pp. 62-68. Springer, Cham, 2019.

BOOK CHAPTERS

1. G K Kanungo, N Singh, J Dash and **A. Mishra**,"Mammogram Image Segmentation Using Hybridization Of Fuzzy Clustering And Optimization Algorithms", Springer Book series on Advances in Intelligence System and Computing, 2014.
2. **A. Mishra** and S. Dehuri. and P.K. Mallick. Fingerprint Classification by Filter Bank Approach Using Evolutionary ANN, Cognitive Informatics and Soft Computing, Springer
3. **A. Mishra** and S. Dehuri. An experimental study of filter bank approach & Biogeography based optimized ANN in fingerprint classification, Lect. Notes Electrical Eng, Springer Nature.

PATENTS:

Filters".

1. Application Number: 202141026736A
Title of Invention: "Smart management of food storage and waster education using block chain technology".
Publication Date (U/S 11A): 20/08/2021
2. Application Number: 202111028655
Title of Invention: "Controlling of Electrical System using Photonic

Publication Date : 25/06/2021