Dr. Rinku Rabidas

Curriculum Vitae

"You have to dream before your dreams can come true" -
Dr. A. P. J. Abdul Kalam

Education

2014–2018 **Doctor of Philosophy**, *National Instituite of Technology Silchar*, Assam.

2014–2014 **Masters of Technology**, *National Instituite of Technology Silchar*, Assam, *GPA – 8.81*.
Specialization–Microelectronics and VLSI

2007–2011 **Bachelor of Engineering**, *RKDF Institute of Science and Technology*, Bhopal, *GPA – 6.95*.
Electronics and Communication Engineering

Ph.D Thesis

Title *Development of an Automatic CAD System for the Localization and Characterization of Mammographic Masses: A Feature based Framework*

Supervisor Dr. Wasim Arif

Description The thesis basically focusses on the development of automatic CAD system for the detection and diagnosis of mammographic masses, a menifestation of breast cancer, inteded to assist the radiologists as a second evaluator for early detection of breast cancer. The early detection will help to reduce the mortality rate.

Masters Thesis

Title *A Fast and Improved Method for Face Recognition using SVM*

Supervisor Dr. R. H. Laskar

Description This thesis explored the way to efficiently recognise a face quickly.

Fields of Interest/Specialization

Biomedical Image Analysis, Pattern Recognition, Computer Vision, Machine Learning, and Image and Video Processing

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Experience

October, 2017–Present — Working as an Assistant Professor in the department of ECE, TSSOT, Assam University.

Subjects/ Courses undertaken

Signals and Systems, Digital Signal Processing, Digital Image Processing

Administrative works

TnP Co-ordinator, Exam Co-ordinator

Technical skills

Operating systems — Windows, Linux

Ianguages — MATLAB, Basics of Python

Tools — Microsoft Office, LaTeX

Communication Skills

2020 — Oral Presentation in 1^{st} International Conference On Advanced Communication Technologies and Signal Processing (ACTS)

2017 — Oral Presentation in 4^{th} International Conference On Signal Processing and Integrated Networks (SPIN)

2016 — Oral Presentation in 6^{th} International Conference On Advances In Computing & Communications (ICACC)

Languages

English and Hindi

Publications

Google Scholar page: `https://scholar.google.co.in/citations?user=LAa0DdAAAAAJ&hl=en`
Research Gate page: `https://www.researchgate.net/profile/Rinku_Rabidas`

- ***Journals***

1. K. Mondal, **R. Rabidas**, R. Dasgupta, A. Midya, and J. Chakraborty, "Enhancement of Hazy Images using Atmospheric Light Estimation Technique," *Journal of Circuits, Systems and Computers*, **In Press**, 2020.
2. **R. Rabidas** and W. Arif, "Characterization of Mammographic Masses based on Local Photometric Attributes," *Multimedia Tools and Applications*, vol. 79, pp.21967-21985, 2020.
3. **R. Rabidas**, A. Midya, J. Chakraborty, and W. Arif, "Multi-Resolution Analysis of Edge-Texture Features for Mammographic Mass Classification," *Journal of Circuits, Systems and Computers*, vol. 20, pp.2050156, 2019.
4. J. Chakraborty, A. Midya , and **R. Rabidas**, "Computer-Aided Detection and Diagnosis of Mammographic Masses using Multi-Resolution Analysis of Oriented Tissue Patterns", *Expert Systems with Applications*, vol. 99, pp.168-179, 2018.
5. **R. Rabidas**, A. Midya , and J. Chakraborty , "Neighborhood Structural Similarity Mapping for the Classification of Masses in Mammograms", *IEEE Journal of Biomedical and Health Informatics*, vol. 22, pp. 826-834, 2018.
6. A. Midya, **R. Rabidas**, A. Sadhu and J. Chakraborty , "Edge Weighted Local Texture Features for the Categorization of Mammographic Masses", *Springer, Journal of Medical and Biological Engineering*, vol. 38, pp. 457-468, 2018.
7. **R. Rabidas**, J. Chakraborty, and A. Midya, "Analysis of 2D singularities for mammographic mass classification", *IET, Computer Vision*, vol. 11, no. 1, pp. 22-32, 2017.

- ***International Conferences***

1. R. Laishram, and **R. Rabidas**, "Detection of Mammographic Masses using FRFCM Optimized by PSO" 13th International Congress on Image and Signal Processing, BioMedical Engineering and Informatics (CISP-BMEI), pp. 327-332, 2020.
2. **R. Rabidas**, D. Ravi, and S. Pradhan, R. Moudgollya, and A. Ganguly "Investigation and Improvement of VGG based Encoder-Decoder Architecture for Background Subtraction," In 1st International Conference On Advanced Communication Technologies and Signal Processing (ACTS) 2020, ***in Press***.
3. **R. Rabidas**, R. Laishram, and A. Roy, "Benign-Malignant Mass Characterization based on Multi-Gradient Quinary Patterns," In proceedings of Advances in Smart Communication and Imaging Systems: International Conference on Smart Communication and Imaging Systems, MEDCOM 2020, ***in Press***.
4. A. Roy, S. Chandra, and **R. Rabidas**, " Improved Switching Vector Median Filter for Removal of Impulse Noise from Color Images," In proceedings of Advances in Smart Communication and Imaging Systems: International Conference on Smart Communication and Imaging Systems, MEDCOM 2020, ***in Press***.
5. **R. Rabidas**, A. Midya, J. Chakraborty, A. Sadhu, and W. Arif "Multi-resolution Analysis using Integrated Microscopic Configuration with Local Patterns for Benign-Malignant Mass Classification" in Proceedings of *SPIE Medical Imaging-2018: Computer-Aided Diagnosis*, vol.

10575, 2018, pp. 105752N.
6. **R. Rabidas**, A. Midya, J. Chakraborty, and W. Arif, "Texture Analysis of Gradient Images for Benign-Malignant Mass Classification" 4th International Conference on Signal Processing and Integrated Networks (SPIN), pp. 201-205, 2017.
7. **R. Rabidas**, A. Midya, A. Sadhu, and J. Chakraborty, "Benign-malignant mass classification in mammogram using edge weighted local texture features" in Proceedings of *SPIE Medical Imaging-2016: Computer Aided Diagnosis*, vol. 9785, 2016, pp. 97 851X-97 851X-6.
8. **R. Rabidas**, A. Midya, J. Chakraborty, and W. Arif, "A Study of Different Texture Features Based on Local Operator for Benign-malignant Mass Classification" *Procedia Computer Science*, vol. 93, pp. 389-395, 2016.