



Dr. Amarjit Roy

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Google Scholar page: <https://scholar.google.co.in/citations?user=ooUDNTwAAAAJ&hl=en>

(Citations: 478, h-index- 11, i10 index-11)

Research Gate page: https://www.researchgate.net/profile/Amarjit_Roy

Academic Qualification

PhD (2014 to 2017, Thesis defended on January 2018)

National Institute of Technology, Silchar

CPI: **8.54** in the scale of 10.00 (Course Work)

Thesis Title: *Design and Implementation of Various Filtering Techniques for Removal of Impulse Noise from Digital Images*

Thesis Defended on January 2018

M. Tech in Microelectronics and VLSI (2012 to 2014)

National Institute of Technology, Silchar

CPI: **8.63** in the scale of 10.00

Post Graduation completed on May 2014

Master Thesis Title: *Improved denoising filters for removing impulse noise from color images*

B. Tech in Electronics and Communication Engineering

Future Institute of Engineering and Management, Kolkata (Sonarpur), West Bengal

Under Maulana Abul Kalam Azad University of Technology, West Bengal (Formerly WBUT)

DGPA: **8.43** in the scale of 10.00

Graduation completed on June 2012

Higher Secondary Examination (WBCHSE)

Balurghat High School, Balurghat, West Bengal

Year of Passing: 2007

Percentage: **85%**

Secondary Examination (WBBSE)

Balurghat High School, Balurghat, West Bengal

Year of Passing: 2005

Percentage: **90.75%**

Experience

1. Assistant Professor

Ghani Khan Choudhury Institute of Engineering and Technology, Malda (A CFTI under MoE)

20th December 2021 to Till Date

Subjects Taught: Analog and Digital Electronics, Microprocessor and Microcontroller.

2. Assistant Professor Sr. Grade-I

VIT AP University, Amaravati

15th July 2020 to 17th December 2021

Subjects Taught: Digital Logic Design, Basic Electrical and Electronics Engineering, Image Processing.

3. Assistant Professor

BML Munjal University, Gurgaon, Haryana

15th May 2017 to 10th July 2020

Subjects Taught: Analog Electronics, Analog Communication Systems, Signals and Systems, Basic Electrical and Electronics, Digital Image Processing, Introduction to Sensors and IoT

Publications

SCI Journals

1. **A. Roy**, L. Manam and R.H. Laskar, "Region adaptive fuzzy filter: an approach for removal of random valued impulse noise," *IEEE Transactions on Industrial Electronics*, vol. 65 (9), pp. 7268-7278, 2018, DOI: 10.1109/TIE.2018.2793225 (IEEE) [SCI].
2. **A. Roy**, J. Singha, S.S. Devi and R.H. Laskar, "Impulse noise removal using SVM classification based fuzzy filter from gray scale images," *Signal Processing*, vol. 128, pp. 262-273, 2016, DOI: 10.1016/j.sigpro.2016.04.007 (Elsevier) [SCI].
3. **A. Roy** and R.H. Laskar, "Multiclass SVM based adaptive filter for removal of high density impulse noise from color images," *Applied Soft Computing*, vol. 46, pp. 816-826, 2016, DOI: 10.1016/j.asoc.2015.09.032 (Elsevier) [SCI].
4. **A. Roy** and R.H. Laskar, "Non-casual linear prediction based adaptive filter for removal of high density impulse noise from color images," *AEU-International Journal of Electronics and Communications*, vol. 72, pp. 114-124, 2017, DOI: 10.1016/j.aeue.2016.12.006 (Elsevier) [SCI].
5. **A. Roy**, J. Singha, L. Manam and R.H. Laskar, "Combination of adaptive vector median filter and weighted mean filter for removal of high density impulse noise from color images," *IET Image Processing*, vol. 11 (6), pp. 352-361, 2017, DOI: 10.1049/iet-ipr.2016.0320 (IET) [SCI].
6. **A. Roy**, J. Singha and R.H. Laskar, "Removal of impulse noise from gray images using fuzzy SVM based histogram fuzzy filter," *Journal of Circuits, Systems, and Computers (JCSC)*, vol. 27 (9), pp. 1850139, 2017, DOI: 10.1142/S0218126618501396 (World Scientific) [SCI].
7. **A. Roy** and R.H. Laskar, "Fuzzy SVM based fuzzy adaptive filter for denoising impulse noise from color images," *Multimedia Tools Applications*, vol. 78 (2), pp. 1785-1804, 2019, DOI: 10.1007/s11042-018-6303-z (Springer) [SCI].
8. **A. Roy**, L. Manam and R.H. Laskar, "Removal of 'Salt & Pepper' noise from color images using adaptive fuzzy technique based on histogram estimation" *Multimedia Tools Applications*, vol. 79, pp. 34851-34873, 2020, DOI: doi.org/10.1007/s11042-020-09107-x.
9. J. Singha, **A. Roy** and R.H. Laskar, "Dynamic hand gesture recognition using vision-based approach for human-computer interaction," *Neural Computing and Applications*, vol. 29 (4), pp. 1129-1141, 2018, DOI: 10.1007/s00521-016-2525-z (Springer) [SCI].
10. S.S. Devi, **A. Roy**, J. Singha, S A Sheikh and R.H. Laskar, "Malaria infected erythrocyte classification based on a hybrid classifier using microscopic images of thin blood smear," *Multimedia Tools and Applications*, vol. 77 (1), pp. 631-660, 2018, DOI: 10.1007/s11042-016-4264-7 (Springer) [SCI].
11. M. Islam, **A. Roy** and R. H. Laskar, "Neural network based robust image watermarking technique in LWT domain," *Journal of Intelligent & Fuzzy Systems*, vol. 34 (3), pp. 1691-1700, 2018 (IOS Press) [SCI].
12. M. Islam, **A. Roy** and R. H. Laskar, "SVM based robust image watermarking technique in LWT domain using different sub-bands" *Neural Computing and Applications (Accepted)* (Springer) [SCI].
13. A. Roy, S. Bandopadhyaya, S. Chandra, S. Suhag, "Removal of impulse noise for multimedia-IoT applications at gateway level" *Multimedia Tools Applications*, 2022, DOI: <https://doi.org/10.1007/s11042-021-11832-w>.

International Conferences

1. **A. Roy**, R.H. Laskar, "Impulse noise removal based on SVM classification", In *TENCON 2015-2015 IEEE Region 10 Conference*, pp. 1-5, IEEE, 2015.
2. **A. Roy**, J. Singha and R. H. Laskar, "Impulse noise removal from color images: An approach using SVM classification based fuzzy filter," *TENCON 2017 - 2017 IEEE Region 10 Conference*, Penang, 2017, pp. 929-934.
3. **A. Roy**, S.S. Devi, R.H. Laskar, "Impulse noise removal from gray scale images based on ANN classification based Fuzzy filter", In *Computational Intelligence and Networks (CINE), 2016 2nd International Conference*, pp. 97-101, IEEE, 2016.
4. L. Manam, **A. Roy**, R. H. Laskar and F. A. Talukdar, "Removal of fixed valued impulse noise using global noise statistics based adaptive histogram fuzzy filter," *TENCON 2017 - 2017 IEEE Region 10 Conference*, Penang, 2017, pp. 2231-2235.
5. S.S. Devi, **A. Roy**, M. Sharma, R.H. Laskar, "kNN classification based erythrocyte separation in microscopic images of thin blood smear", In *Computational Intelligence and Networks (CINE), 2016 2nd International Conference*, pp. 69-72, IEEE, 2016.

Organization of Workshop

1. Organized International **Workshop on Signal Processing Using Machine Learning: Applications & Hands-On (ONLINE)** technically sponsored by **IEEE Guntur Subsection**, India from 28th August 2021 to 1st September 2021 at VIT-AP University, India as a **Convener**.
2. Organized One **Week Workshop on Artificial Intelligence: Applications and Hands-On (Virtual Mode)** technically sponsored by Mathworks by 18th April 2022 to 22nd April 2022 at Ghani Khan Choudhury Institute of Engineering and Technology, India as a **Convener**.
3. **Student Organizer** in a Three Days Lecture Series in Electronics and Communication Engineering at NIT Silchar held during 12th February 2016 to 14th February 2016.

Reviewer of Journals

1. Served as a Reviewer of IEEE Transactions of Human-Machine Systems, IEEE Transactions of Industrial Electronics, IEEE Transactions on Emerging Topics in Computational Intelligence, IEEE Access, IEEE Signals Processing Letters etc.
2. Served as a Reviewer of different journals of Springer, Elsevier, Wiley and other reputed journals.
3. Served as a reviewer of different IEEE conferences and other reputed conferences.

Ongoing Research

1. Submitted proposal in SRG (SERB): **Smart Car Parking System**
2. Doing research in Glaucoma Detection, Detection and Analysis on COVID-19, Impulse Noise Removal, Image Super-resolution.
3. Completed RGEMS SEED grant funded by VIT-AP University from September 2020 to December 2021 titled: **Computer-aided glaucoma diagnosis: classification of stages using hybrid CNN model**.

Session Chair

Served as a Session chair at 3rd International Conference on Innovative Trends In Information Technology (ICITIIT'22).

Personal Details

Date of Birth: 7 April 1990

Language Known: English, Hindi, Bengali, Assamese

Marital Status: Married

Nationality: Indian

Permanent Address: Thana More, P.O- Tapan, Dist- Dakshin Dinajpur, West Bengal-733127.

Declaration

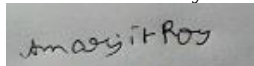
I am confident of my ability to work in a team. I hereby declare that the information furnished above is true to the best of my knowledge and belief.

Thanking You

Date: 05/ 05/ 2025

Place: Malda

Yours faithfully



Amarjit Roy