Nabojwal Acharjee

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Research Interests

Vision Transformers, Diffusion Models, GANs, Neural Radiance Fields, Manifold Learning, Metaheuristic Algorithms, CNNs

Objective

A passionate and dedicated graduate student in Electronics and Communication Engineering, specializing in deep learning-based biomedical image processing. I aim to contribute innovative research to advance ML/DL-based affordable healthcare applications for the early detection and treatment of critical diseases.

Education

Tezpur (Central) University

Assam, India

Ph.D. in Electronics and Communication Engineering

2023 - Present

Research Area: Biomedical Image Processing using Deep Learning.

CGPA: 9.38/10

North Eastern Regional Institute of Science and Technology

Arunachal Pradesh, India

M.Tech in Electronics and Communication Engineering

2019 - 2021

Thesis: Performance Comparison of a β -Ga₂O₃-based HEMT for Different High-k

Dielectric Passivation.

CGPA: 9.04/10 Department Rank: 2

North Eastern Regional Institute of Science and Technology

Arunachal Pradesh, India

B.Tech in Electronics and Communication Engineering

2014 - 2017

Project: Analysis of Correlation and Cochannel Interference in Cellular Network

CGPA: 4.23/5

Tripura (Central) University

Tripura, India

Diploma in Electronics and Telecommunication Engineering

2011 - 2014

CGPA: 7.81/10

Publications

Iournal

[J1]: **N. Acharjee**, S. Singh, A. P. Dadi, S. Bordoloi, and A. Ray, "Investigation of High-k Dielectric Passivation Effects on DC Performance of AlN/ β -Ga₂O₃ HEMTs," *Semiconductors*, vol. 59, no. 5, pp. 452–464, May 2025. doi:10.1134/S1063782624602632.

Technical Skills

- Domains: Machine/Deep Learning
- Languages: Python, MATLAB
- Frameworks: PyTorch, TIMM, HuggingFace etc.
- Tools: LaTeX, OriginLab, MS Office (Excel, Word, PowerPoint)

Soft Skills

- Adaptability and quick learning ability.
- Strong collaboration and teamwork skills, demonstrated through mentoring and interdisciplinary research.
- Excellent written and verbal communication skills, with experience of writing research papers and presenting research at conferences.
- Effective time management and project management skills, developed through balancing research, coursework, and lab responsibilities.

Fellowships and Scholarships

• Visvesvaraya PhD Fellowship, MeitY, Govt. of India

2023-Present

• Ishan Uday NER Scholarship, UGC, Govt. of India

2014-2017

• NEC Scholarship, DoNER, Govt. of India

2011-2014

Teaching / Mentoring

- Assisted in Lab Sessions on Digital Signal Processing, Tezpur University
- Assisted in Lab Sessions on Digital and Analog Communication Engineering
- Assisted M.Tech and B.Tech students on final year projects related to biomedical signal/image processing with Deep Learning.

References

Prof. Ashok Ray

Dept. of ECE, NERIST, Arunachal Pradesh

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