

Mahin Anjum

Lecturer, Bangladesh Army University of Science and Technology (BAUST), Saidpur, ☎ (+880) 1974036789

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RESEARCH INTERESTS

#Biosensors, #HeterojunctionTFET, #WideBandgapMaterials, #LowNoiseAmplifiers, #Nanoelectronics, #Machine Learning Application

EDUCATION

Bangladesh University of Engineering and Technology (BUET)

2024 – Present

Master of Science (M.Sc.) in Electrical and Electronic Engineering

Major: Electronics and Photonics

Thesis Topic: Performance Analysis of InP/InGaAs Ternary Compound Semiconductor TFET-Based Biosensor [Ongoing]

Supervisor: [Dr. Ehsanur Rahman](#)

Bangladesh University of Engineering and Technology (BUET)

April 2019 – June 2024

Bachelor of Science (B.Sc.) in Electrical and Electronic Engineering

CGPA: 3.87/4.00 (Position: 28th out of 195)

Major: Electronics and Photonics

Thesis Title: Advancements in mm-Wave LNA Design: Optimizing Performance with Modified DS and Post-Linearization Techniques at 26 GHz

Supervisor: [Dr. Apratim Roy](#)

ACADEMIC EXPERIENCE

Bangladesh Army University of Science and Technology (BAUST)

Saidpur, Bangladesh

Lecturer, Dept. of EEE, [University Profile](#)

February 2025 - Present

PUBLICATION (Conferences)

- **M. Anjum**, S. Islam, “Performance Optimization and Linearization of a Two-Stage 26 GHz Double-Stage Single-End Low-Noise Amplifier Using Modified Derivative Superposition and Post-Linearization,” *2025 IEEE International Conference on Quantum Photonics, Artificial Intelligence, and Networking (QPAIN 2025)*, Dhaka, Bangladesh, 2025.
- **M. Anjum**, Md. M. Hasan, “Ultra-Selective Dual-Composite Gate GaSbAs/InGaAs Heterojunction TFET Biosensor,” *7th International Conference on Electrical Information and Communication Technology (EICT 2025)*, Khulna, Bangladesh, 2025 [Submitted].

STANDARDIZED TEST SCORE

IELTS (International English Language Testing System): Scheduled for October 2035

ACADEMIC PROJECTS

- Ordinary differential equation solver and filter design using MATLAB [\[Report\]](#)
- Voice based attendance system using Machine Learning (KNN) [\[Report\]](#)
- Line Following and Obstacle Avoider Robot using PID controller [\[Report\]](#)
- LASER Based Communication System [\[Report\]](#)
- Analytical Behavior of HVDC Under Normal and Faulty Conditions [\[Report\]](#)
- Speed Control of DC Motor with Feedback from Digital Tachometer [\[Report\]](#)
- IOT based door lock system [\[Report\]](#)
- Low Dropout Regulator (LDO) design [\[Report\]](#)
- Electronic Fuse Design using Op-amp [\[Report\]](#)
- Four ways traffic controller using Digital Logic Design [\[Report\]](#)
- Nine story building design in AutoCAD [\[Report\]](#)
- I2C bus protocol using Verilog [\[Report\]](#)
- Experimental setup to measure L-I characteristics of LED [\[Report\]](#)

PROFESSIONAL TRAINING

Internship at Inovace Technologies Ltd., Dhaka

Duration: 5 Nov 2023 - 13 Nov 2023 (9 Days)

CERTIFICATION & WORKSHOPS

- Hands-on PCB Workshop: Learn, Design & Fabricate Your Own Circuit, organized by the Department of Electrical and Electronic Engineering, Bangladesh Army University of Science and Technology (BAUST), Saidpur.
Apr 24–26, 2025
- Orientation and Training Program for faculties, officers, and staff, organized by the Institutional Quality Assurance Cell (IQAC), BAUST.
Feb 2–6, 2025

SOFTWARE SKILLS

Programming Languages	C; C++; MATLAB; Python.
Framework and Libraries	Django; Matplotlib; App Designer(Matlab).
TCAD Softwares	Silvaco TCAD; Synopsys Sentaurus TCAD.
Simulation Software	Spice; CYME PSAF; Proteus; Cadence Virtuoso.
Web Development	HTML5.
Embedded Systems	STM-32; FPGA Module; ATMEGA Microcontroller.
Microcontroller Software	AVR; Atmel Studio; Arduino.
CAD Software	AutoCAD Electrical.
Languages	English; Bangla.

AWARDS & ACHIEVEMENTS

Dean's List Award	2021
Regional Champion at Mathematical Olympiad	2014–2016
Junior, Champion	2014
Secondary, 1st Runner Up	2015
Secondary, 2nd Runner Up	2016
National Physics Olympiad	
6th Bangladesh Physics Olympiad – Secondary, Position: 2nd	2016
8th Bangladesh Physics Olympiad – Higher Secondary, Position: 16th	2018
Board Talent Pool Scholarship	
SSC – Board of Intermediate and Secondary Education, Dinajpur	2016
HSC – Board of Intermediate and Secondary Education, Dhaka	2018

EXTRA-CURRICULAR ACTIVITIES

General Member, BUET Career Club	2019-2024
General Member, Notre Dame Science Club	2016-2017
Member, Departmental Cricket Team	2023
Member, Departmental Badminton Team	2023

REFERENCES

Dr. Apratim Roy

Professor, Department of Electrical and Electronic Engineering, Bangladesh University of Engineering and Technology (BUET)

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Dr. Muhammad Abdullah Arafat

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