

Aditya Das Gupta



Professional Profile

Electrical and Electronic Engineering graduate with strong technical expertise in embedded systems, IoT development, and software engineering. Proven ability to design, implement, and manage engineering projects with excellent problem-solving and analytical skills.

Contact

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Technical Skills

- **Programming:** Python, C++
- **Embedded Systems:** Arduino, ESP8266, Microcontrollers
- **Circuit Design:** Proteus, LTSpice, Tanner EDA
- **Simulation Tools:** MATLAB, Microwind, DSCH
- **Web Development:** HTML, CSS, WordPress, MQTT
- **Mobile Development:** Android, Kotlin

Engineering Skills

- IoT System Design
- PCB Design & Layout
- Sensor Integration
- Signal Processing
- Control Systems
- Data Analysis

Professional Skills

- Project Management
- Technical Documentation
- Team Leadership
- Problem Solving
- Research & Development
- Quality Assurance

Certifications

- Industrial Technology Training (TICI)
- IEEE Conference Presenter

Languages

Bangla: Native
English: Fluent

Education

B.Sc. in Electrical & Electronic Engineering Feb 2020 – Aug 2025
Barisal Engineering College, University of Dhaka Technology Unit
GPA: 3.23/4.00 (Up to 7th Semester)
Relevant Coursework: Digital Signal Processing, Control Systems, Microprocessors, Communication Systems, Power Electronics, VLSI Design

Higher Secondary Certificate 2019
Chattogram Cantonment Public College
GPA: 4.92/5.00

Secondary School Certificate 2017
Begum Gul Chemonara Academy School & College
GPA: 5.00/5.00

Engineering Projects

Smart Water Tank Monitoring System 2024
◇ Designed IoT-based water level monitoring using ESP8266 with Android app interface
◇ Implemented MQTT protocol for real-time data transmission and sensor fusion
◇ Features 24/7 background alerts and remote monitoring capabilities

IoT Productivity Management System 2024
◇ Developed ESP8266 device with Android application for productivity tracking
◇ Created local data storage system without cloud dependency

SMS-Controlled Smart Thermostat 2023
◇ Engineered non-WiFi temperature control system for remote agricultural applications
◇ Integrated GSM module for SMS-based control and status updates

Automated Plant Monitoring System 2023
◇ Designed IoT-based cactus health monitor with automated watering
◇ Integrated Blynk platform and Google Sheets for data logging

Research Experience

Undergraduate Thesis Researcher Sep 2024 – Aug 2025
Barisal Engineering College
◇ Developed Explainable AI Framework for Non-Invasive Blood Glucose Prediction
◇ Applied machine learning techniques and statistical analysis for healthcare applications
◇ Supervised by Md. Israil Hossain, Lecturer, Dept. of EEE

Professional Experience

Industrial Training Participant May 2025 (2 Weeks)
Training Institute for Chemical Industries, Narsingdi
◇ Gained hands-on experience with industrial electrical systems and instrumentation
◇ Learned control processes and industrial automation systems

Publications

Feature-Optimized Blood Glucose Level Prediction with Explainable AI 2025
4th IEEE International Conference on Signal Processing, Information, Communication and Systems

Feature-Optimized Approach for Blood Glucose Forecasting Using XAI 2025
International Conference on Multidisciplinary Computer Science, Electrical, Business & Literature

Leadership & Activities

General Secretary Jul 2024 – Aug 2025
BEC Film & Photography Society

Editor May 2024 – Present
Rotaract Club of Chittagong, Karnaphuli

Executive Member 2024 – 2025
BEC Electronics Club, Research and Innovation Club, Sports Club, Cultural Club

Awards & Honors

Compensatory Scholarship 2020 – 2025
Barisal Engineering College for Academic Performance

Honorary Award 2017
Cambridge School and College for Outstanding SSC Results