# Farhan Arefin Khan

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### **EDUCATION**

Sylhet Engineering College 2020 - 2025

Bachelor of Science in Electrical and Electronic Engineering (EEE).

CGPA: 3.57 out of 4.00

Thesis: Detection And Classification Of 2D Material Flakes Using Ensemble GMM And Neural Networks

### **CERTIFICATIONS**

Control Design Onramp with Simulink

MATLAB Academy • 2024

30 Days Webinar Participation on PLC, VFD, HMI

Gobeshona Learning Academy • 2024

**VLSI System On Chip Design - Overview** 

Maven Silicon • 2025

#### **PROJECT**

Three-Phase Inverter System using IGBT and Arduino

Sylhet Engineering College

Smart Light Switch with Manual and Automatic Control

Sylhet Engineering College

### **COURSEWORK**

Electrical Properties of Materials Microprocessor and Embedded Systems Digital Signal Processing Continuous Signals and Linear System

Digital Electronics Power Electronics Electronics I & II Very Large Scale Integration (VLSI)

Introduction to Computer Language Control System I Communication I Fundamentals of Biomedical Engineering

Power System I & II Power Plant Engineering

### INVOLVEMENT

# Served as Cultural Secretary

Sylhet Engineering College • EEE Association • August 2024 - July 2025

### **SKILLS**

Programming & Scripting: Python, C, C++, MATLAB, HTML, CSS, JavaScript

Embedded Systems: Arduino, ESP32, Proteus Web Development: HTML, CSS, JavaScript, React

Machine Learning & Deep Learning: NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, OpenCVImage Classification, Semantic Segmentation, CNNs

Simulation & Design Tools: MATLAB, Simulink, AutoCAD, SAM (System Advisor Model)

Data Analysis & Visualization: Excel, PowerPoint, Matplotlib, Seaborn

Productivity & Collaboration: Jupyter Notebook, Git, GitHub, Microsoft Word, Excel, PowerPoint

Soft Skills: Curious, Problem-Solving, Teamwork, Quick Learner, Presentation Skills, Self-Motivation, Leadership

### PROGRAMMING EXPERIENCE

PROBLEM SOLVING •

CODEFORCES: • Solved 300+ problems • Max rating: 1009, newbie CODECHEF: • Solved 150+ problems • Max rating: 1436, 3 Star Coder

Other: (LeetCode, LightOJ, UVA, CSES) • Solved 50+ problems on Data structure and Algorithm

### PROFESSIONAL TRAINING

## $Industrial\ Technology\ on\ Electrical\ Engineering\ \&\ Instrumentation$

Training Institute for Chemical Industries (TICI), Narsingdi, Bangladesh. Obtained A+ grade

January 2024 - January 2024, narsingdi

Single Phase Electrical Wiring and Installation

Sylhet Engineering College May 2023 - May 2023 - Sylhet