

# Md. Abu Sufyan

- Pangabandhu Sheikh Mujibur Rahman Hall, RUET, Rajshahi, Bangladesh
- +880 1580 352238
- abusufyan.cse20@gmail.com
- linkedin.com/in/md-abu-sufyan
- sufyan-github

### **OBJECTIVES**

Driven by a passion for technology and innovation, I aim to apply my expertise in **Machine Learning, Deep Learning, and Computer Vision** within the field of **Computer Science & Engineering**. My goal is to contribute to impactful research, advanced software development, and community-oriented projects while continuously enhancing my technical and professional skills. I seek opportunities in collaborative environments that foster leadership, effective communication, and lifelong learning.

### **WORK EXPERIENCE**

March 2024 - Present

# Machine Learning & Al instructor · Artificial Intelligence Bangladesh

High Tech Park, Silicon Tower, Rajshahi, Bangladesh aibd.ai

- Conducted hands-on training sessions on Machine Learning, Deep Learning, Computer Vision and Data Science for students and professionals.
- Designed and delivered course materials covering supervised/unsupervised learning, model evaluation, and deployment workflows.
- Mentored learners through practical projects, improving their problem-solving and coding skills in Python and ML frameworks.
- Collaborated with AI Bangladesh community initiatives to expand outreach and promote applied AI education in Bangladesh.

Jun 2025 - Present

### **Campus Representative · FutureNation Volunteer**

Rajshahi University of Engineering & Technology (RUET), Rajshahi, Bangladesh futurenation.gov.bd

- Organized and facilitated FutureNation programs and workshops within the RUET campus.
- Led university-level initiatives to engage students in FutureNation's skill-building and youth empowerment projects.
- Collaborated with FutureNation teams and partner organizations to ensure impactful program execution.

Feb 2025 - Present

### President · RUET IoT Club

Rajshahi University of Engineering & Technology (RUET), Rajshahi, Bangladesh ruetiotclub.org

- Organized workshops and events on IoT and smart technologies.
- Coordinated technical sessions focusing on innovation, automation, and advanced IoT applications.
- Collaborated with student bodies to enhance hands-on learning and technical collaboration.

Jul 2024 - Present

## Research Assistant · Machine Learning Research Group

Department of Computer Science & Engineering, RUET, Rajshahi-6204, Bangladesh Supervised by: Assistant Prof. SM Mehedi Hasan

- Engaged in machine learning research with a focus on sentiment analysis and predictive modeling.
- Co-authored papers accepted at ICCIT 2024 on social media bias and time-series forecasting.

Jul 2025 - Present

## **Executive Member, Human Resource Management · Aachol Foundation**

Dhaka, Bangladesh

aacholfoundation.com

- Supported human resource activities, including volunteer onboarding and member coordination.
- · Assisted in organizing awareness campaigns and mental health support initiat-
- · Collaborated with the HR team to enhance operational efficiency in communitydriven projects.

August 2025 - Present

# Founding Member · RUET Computing Society

Rajshahi University of Engineering & Technology (RUET), Rajshahi, Bangladesh ruetcs.org

- Played a key role in establishing the Computing Society at RUET.
- · Organized coding competitions, seminars, and collaborative projects to promote computing knowledge.
- · Worked with fellow founding members to draft the society's structure and roadmap.

Sep 2024 - Present

# Human Resource Officer Volunteer for Bangladesh (VBD)

Rajshahi District, Bangladesh

vbd.com.bd

- Managed volunteer recruitment and training programs for social initiatives.
- · Organized campaigns on public health and environmental awareness.
- · Coordinated with NGOs and local authorities to implement SDG-aligned community projects.

### **EDUCATION**

Mar 2021 - 2025

# **Bachelor of Science in Computer Science & Engineering**

**CGPA:** 3.68 / 4.00

Department of Computer Science & Engineering

Rajshahi University of Engineering & Technology (RUET), Rajshahi-6204, Bangladesh

### INDUSTRIAL ATTACHMENT

March 2025

# 15-Day Industrial Attachment - Real-Time AI Project

Developed a real-time traffic sign detection system using trained deep learning models and a web interface. Gained hands-on experience in a collaborative office setting with developers and data scientists.

- Built a web-based application integrating YOLOv8, MobileNet, and ResNet models for live video detection.
- Explored Generative AI for auto-annotation and dataset enhancement.
- · Contributed to full-cycle development: model training, frontend/backend integration, and deployment.
- Participated in daily standups, sprint reviews, and presented project outcomes as a team.

### **SKILLS & INTERESTS**

PROGRAMMING & WEB DEVELOPMENT

Frontend: HTML5, CSS3, TailwindCSS, JavaScript, React

**Backend:** Node.js, Express.js, PHP (Laravel 11)

Database: MySQL, MongoDB Version Control: Git, GitHub

HARDWARE DESIGN & VLSI: Verilog, HDL

**VLSI** Architecture: ISA Design, CPU Design

Tools & Platforms Visual Studio Code, Postman, Firebase Console, Git CLI, Figma (Basic)

Machine Learning, Deep Learning, Computer Vision, RESEARCH INTERESTS

Sentiment Analysis, Time-Series Forecasting, Predictive Modeling

LANGUAGES Bangla – Native fluency

English – Full professional proficiency (written and spoken)

**INTERPERSONAL &** Team Leadership, Technical Communication, Public Speaking,

**SOFT SKILLS** Project Planning, Event Management

**PROFESSIONAL** Full-Stack Development, Mobile App Engineering, **INTERESTS** Al for Social Good, Tech-Driven Community Initiatives

### CONFERENCE PAPERS

"A Cross-Analyzing Approach to Sentiment and Bias Detection in Social Media: Insights from Geopolitical Conflicts"

Presented at ICCiT 2024, Cox's Bazar, Bangladesh

[2] "Improving Monkeypox Outbreak Prediction Through Time-Series Forecasting with Machine Learning Models"

Presented at ICCiT 2024, Cox's Bazar, Bangladesh

### **PROJECTS**

#### 2025 **Traffic Sign Detection System**

- Real-time detection of traffic signs using YOLOv8, MobileNet, and ResNet.
- Deployed on a web interface with live video processing support.

#### 2024 **Sentiment Analysis and Bias Detection**

- Developed ML/DL models for detecting sentiment and geopolitical bias in social media text.
- Supported academic research published in ICCIT 2024.

#### **Time-Series Forecasting for Health Data** 2024

- Built forecasting models to predict Monkeypox outbreak trends.
- · Implemented LSTM, GRU, and ensemble ML models to improve predictive accuracy.

# 2024 Attendance Management App

- · Cross-platform mobile app built with Flutter and Dart.
- Integrated Firebase for authentication and real-time database.
- Applied Riverpod for efficient state management and clean UI design.

### 2023 - Ongoing

### **Full-Stack Web Development Projects**

- · Designed responsive frontends with React, TailwindCSS, and DaisyUI.
- Built backends with Node.js, Express.js, MySQL, and PHP (Laravel).

### **VOLUNTEERING**

Jan 2021 - Present

### **Manus Manusher Jonnya Foundation**

Campus Volunteer

Contributed to disaster relief, education, and youth empowerment.

June 2023 - Present

# **Volunteer for Bangladesh (Jagoo Foundation)**

Committee Member

Organized public health, environmental campaigns, and youth development projects.

# **CERTIFICATIONS**

# December 14, 2024 Certified Associate in Project Management (CAPM)® Certification Course

PMI (Project Management Institute)

Completed a certification course on project management principles, methodologies, and best practices according to PMI standards.

### 2024 App Development with Flutter

Ostad

Successfully completed a hands-on course on Flutter app development, covering UI/UX design, state management, and backend integration.

# 2024 Introduction to Machine Learning

Kaggle

Completed an introductory course on machine learning, covering supervised and unsupervised learning techniques, algorithms, and model evaluation.

## 2024 Basic Networking Exam

Cisco Networking Academy

Successfully completed a fundamental networking exam covering networking concepts, protocols, and troubleshooting.

### December 17, 2024 Art of Problem Definition

Passport to Earning Bangladesh (Generation Unlimited)

Focused on problem-solving techniques, critical thinking, and structuring problems effectively for optimal solutions.

## May 21, 2024 Workplace Communication Essentials

Passport to Earning Bangladesh (Generation Unlimited)

Learned key skills in workplace communication, professional etiquette, and effective collaboration in business environments.

# February 5, 2025 The SDG Primer

**UNDP** Bangladesh

Gained knowledge about the Sustainable Development Goals (SDGs), their implementation, and impact on global development.

### **REFERENCES**

[1] Prof. Dr. Md. Ali Hossain

Professor & Head, Department of Computer Science & Engineering Rahshahi University if Engineering & Technology, Rajshahi-6204, Bangladesh Mobile: +880 1959 600498, Email: ali.ruet@gmail.com

[2] Assist. Prof. Md. Azmain Yakin Srizon

Assistant Professor, Department of Computer Science & Engineering Rahshahi University if Engineering & Technology, Rajshahi-6204, Bangladesh Mobile: +880 1790 187189, Email: azmainsrizon@cse.ruet.ac.bd

# **DECLARATION**

I declare that all the information provided is accurate and authentic to the best of my knowledge.

Md. Abu Sufyan