



Akid Mahmud

akidmahmud2021@gmail.com | 01840193060 |  akidmahmud |  akidmahmud

Objective

CSE undergraduate passionate about software development and emerging technologies. Skilled in various programming languages and frameworks, with experience in building and testing applications. Eager to contribute effectively while learning and growing in the tech field.

Experience

Research Assistant (Unofficial), American International University – Bangladesh (AIUB) Mar 2024 – Aug 2024

- Assisted faculty in academic research projects focused on computer science and engineering.
- Contributed to literature reviews, data preprocessing, and experiment setup.
- Gained practical experience in research methodology, academic writing, and collaborative teamwork.

Education

B.Sc. in Computer Science and Engineering, American International University – Bangladesh (AIUB) Jan 2022 – Sept 2025

- **CGPA:** 3.87 / 4.00
- **Major:** Software Engineering
- **Minor:** Information Systems

Projects

Modern Pharmacy Management System, American International University Bangladesh Mar 2024 – Apr 2024

- Framework/Tools: C#, .NET Framework, SQL Server
- Automated **inventory, sales, and prescriptions**, reducing manual work by **40%**
- Designed real-time reporting dashboards, improving decision-making speed by **30%**

Web-Based CNN Face Detection System, American International University Bangladesh Dec 2024 – Jan 2025

- Framework/Tools: Python(NumPy, Pandas), TensorFlow, OpenCV, HTML/CSS/JS
- Built a **real-time face detection system** with CNN models, my models accuracy was **98%**
- Enabled **cross-platform access** through web browsers with responsive design

Event Buddy (Frontend Project), American International University Bangladesh Jun 2024 – Aug 2024

- Framework/Tools: React, Next.js, TypeScript, Tailwind CSS
- Built a **dynamic event booking platform** with user/admin views and simulated login
- Optimized UI/UX, enabling **50% faster navigation** via Next.js dynamic routing

Awards & Academic Recognition

Honorable Mention – Physics Olympiad, Independent University Bangladesh (IUB) 2017

Recognized for noteworthy performance and understanding of advanced physics concepts.

Dean's Award – Academic Excellence, American International University Bangladesh (AIUB) 2023-2025

Awarded for outstanding academic achievement, highlighting consistent excellence and dedication to academic pursuits.

Merit based Scholarship, American International University Bangladesh (AIUB)

2022 – 2024

Awarded for maintaining a CGPA above 3.75 for three consecutive semesters.

Certifications

Software Quality Assurance and Automated Testing — EDGE Bangladesh (2024) **Full Stack Development with MERN** — Grameenphone Academy **Software Quality Assurance and Industry standers** — FastFlowUp (2025) **WordPress Development** — Grameenphone Academy **IT Automation with Python** — Google (Coursera) **EWU RoboFest National Hackathon** — East West University (2024)

Research Work

Enhanced U-Net Based Medical Image Segmentation, American International University Bangladesh

Dec 2024 – Mar 2025

- Framework/Tools: Python, TensorFlow/Keras, PyTorch, OpenCV
- Developed a **hybrid U-Net 3+ model** on the **BRaTS 2021 dataset**, achieving **12% higher accuracy** than Optimized U-Net
- Optimized preprocessing and evaluation pipeline, improving segmentation efficiency in medical image analysis

Robust XAI-Driven Adversarial Defense Framework, American International University Bangladesh

Jan 2025 – Present

- Framework/Tools: Python, PyTorch
- Built a **GAN-based adversarial defense system (WGAN-GP + XAI Detector)** for image security
- Achieved improved robustness against multiple attacks (**FGSM, PGD, CW**), with AUROC and accuracy gains of **10–15%**
- Integrated **autoencoder purification and anomaly detection**, reducing adversarial vulnerability by **20%**

Technologies

Languages: C++, C#, Java, Python, PHP, JavaScript, TypeScript, SQL

Frameworks & Libraries: React, Next.js, Node.js, Express.js, TensorFlow, Keras, OpenCV

Databases: MySQL, Microsoft SQL Server

Extracurricular Activities

Workshop: Quality Assurance and Testing on Software, Hosted by Fast Flow Up

2024

- Learned best practices in **Quality Assurance and Testing** for software and gained valuable insights into industry standards and workflows

Volunteer, Mollarteke Sechha Sebok Club

2020 – Present

- Conduct monthly free blood pressure and sugar check-ups
- Organize awareness campaigns to promote community health and well-being

Recommendations

Shahriar Mushficul Islam

Chief Executive Officer (CEO), Cloud Vortex Innovation
shahriar@cloudvortexinnovation.com

Dr. Amirul Islam

Assistant Professor, Department of COA
American International University Bangladesh
amirul@aiub.edu
linkedin.com/in/Amirul.islam