

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
<ul style="list-style-type: none">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
<ul style="list-style-type: none">CGPA: 3.87 / 4.00Major: Software EngineeringMinor: Information Systems	

Projects

Modern Pharmacy Management System , American International University Bangladesh	Mar 2024 – Apr 2024
<ul style="list-style-type: none">Framework/Tools: C#, .NET Framework, SQL ServerAutomated 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
<ul style="list-style-type: none">Framework/Tools: Python(NumPy, Pandas) , TensorFlow, OpenCV, HTML/CSS/JavascriptBuilt 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
<ul style="list-style-type: none">Framework/Tools: React, Next.js, TypeScript, Tailwind CSSBuilt a dynamic event booking platform with user/admin views and simulated loginOptimized 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)
Awarded for maintaining a CGPA above 3.75 for three consecutive semesters.

2022 – 2024

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, Mollartek 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](https://www.linkedin.com/in/Amirul.islam)