Shaikh Nahian

 Github | LinkedIn | Personal Website

RESEARCH INTERESTS

- Cybersecurity in AI Systems
- Adversarial Machine Learning
- AI-Driven Software Quality Assurance
- AI for Medical Imaging & Computational Biomarkers
- Efficient AI
- Human-Aligned & Responsible AI

EDUCATION

Chittagong University of Engineering & Technology — 2018 - 2023
- BSc in Computer Science and Engineering (GPA: 3.15/4.0)

Notre Dame College — 2015 - 2017
- HSC (GPA: 5.00/5.00)

Motijheel Ideal School and College — 2013 - 2015
- SSC (GPA: 5.00/5.00)

PUBLICATIONS

Shaikh Nahian and Mohammed Moshiul Hoque (2025). "Deep Autoencoder Based Protection for Malware Detection Models from Adversarially Perturbed Data". Presented at 4th IEEE International Conference on Signal Processing, Information, Communication and Systems (SPICSCON) 2025; Proceedings accepted and forthcoming in IEEE Xplore.

PROJECTS

- **LogShark: Log Analysis & Monitoring Tool** — *GeminiAPI, LangChain, WebSocket, NodeJS* [ ]
  - Developed a tool to analyze uploaded log files or stream live logs over SSH.
  - Enabled natural-language queries using LLMs for real-time insights.
  - Designed for assisting testers in automated log monitoring workflows.

- **Deep Autoencoder-Based Protection for Malware Detection Models from Adversarially Perturbed Data** — *Python, TensorFlow, Keras, Pandas, ART* [ ]
  - Built an autoencoder-based defense for ML/DL malware classifiers.
  - Addressed evasion attacks created from adversarial malware samples.
  - Improved model robustness against adversarial perturbations.

- **PLDC WebApp**　　　　　　　　　　　　　*ReactJs, FastAPI, TensorFlow, CNN*
  [🌐]

  – Developed a CNN-based potato leaf disease classifier and deployed it as a web application.

  – Implemented ReactJS and FastAPI for real-time image-based diagnosis.

- **ChatterBox**　　　　　　　　　　　　　　*Javascript, PHP, MySQL, AJAX, Bootstrap*
  [🌐]

  – Secure instant messaging app with credentials-based authentication and real-time messaging.

  – Added user search and active/inactive status tracking features.

WORK EXPERIENCE

Software Engineer, QA at Therap(BD) Ltd.　　　　　　　　February 2024 - present

– I test web applications through manual and Playwright-based automation, validate APIs using Postman, and manage defects throughout their lifecycle. I work closely with developers to reproduce issues, mentor junior testers, and ensure features meet HIPAA security and privacy requirements while safeguarding PHI.

NON-ACADEMIC SERVICE

CUET Debating Society, Vice President　　　　　　　　　June 2022 – June 2023

– Part of the management committee for 16th Inter Departmental Debate Competition- 2022.

– Part of the management committee for Women's Day Debate Tournament- 2023.

– Organized Freshers Reception program welcoming varsity freshmen.

CUET Computer Club, Assistant General Secretary　　　　August 2022 – August 2023

– Part of the management committee for CUET Intra University Programming Contest- 2023.

– Organized numerous online and offline sessions on Competitive Programming, Natural Language Processing, and Research Methodologies.

– Organized Freshers Reception program welcoming varsity freshmen.

SKILLS

Research Methods	Experimentation, Problem Solving, Analysis, Data Management, Survey, Interviewing
Web & Mobile Testing	Manual Testing, Automation, API Testing, Regression, Integration, E2E Testing, SDLC, STLC, Risk-Based Testing
Tools	Playwright, Selenium, Postman, Newman, Jira, Splunk
Programming Languages	Python, C++, JavaScript, Java
Libraries	Node.js, React, TensorFlow, Pandas
Databases	MySQL, MongoDB, Oracle
CI/CD & VCS	Git, Jenkins, GitHub Actions
Languages	Bangla (native), English (C2 Level)