

JAID MONWAR CHOWDHURY

jaidmonwar.official@gmail.com | +8801781737438 | [Website](#) | [GitHub](#)

EDUCATION

Bangladesh University of Engineering and Technology (BUET)

February 2020 – March 2025

Bachelor of Science in Computer Science and Engineering

RESEARCH EXPERIENCE

Prof. Reyhaneh Jabbarvand's Group, University of Illinois Urbana-Champaign, Urbana, Illinois

Remote Research Intern, June 2025 – Present

- Developing a framework to generate unit tests across multiple programming languages (C, Java, and Python).
- Designed tools and workflows for enhanced reliability and maximise code coverage.
- Wrote a modular component to provide the agent with multi-language parsing and generation capabilities.
- Implemented a semantic analysis module to deepen the agent's program understanding.
- Conducted evaluations of scalability, reliability and test coverage enhancements.
- Co-authoring a paper on the framework, preparing to-be submitted at **ISSTA 2026**.

Prof. Anindya Iqbal's Group, BUET, Dhaka, Bangladesh

Research Assistant, March 2025 – September 2025

- Co-developed an agentic framework that translates natural language test cases into executable Web UI test scripts.
- Developed the Web Agent architecture to enable autonomous Web UI traversal.
- Implemented and deployed the end-to-end backend and frontend infrastructure for the research framework.
- Curated a dataset of natural language test cases from real-world websites for evaluation.
- Conducted evaluations of maintainability, robustness, and quality of the scripts against industry-standard tools.
- Co-first authored a paper soon to-be submitted at **FSE 2026**.

WORK EXPERIENCE

Yobo AI, Canada

Remote Software Engineer, June 2024 – Present

- Co-developed an AI-powered phone-call agent to automate task-oriented customer interactions for restaurants.
- Led the design of a multi-step reasoning pipeline that dynamically retrieves and injects relevant menu data into the LLM's context, enabling queries on large-scale knowledge bases.
- Designed prompts and functions for intelligent tool calling.
- Contributed to the development of a dynamic VAD system for a seamless customer experience.

ACHIEVEMENTS AND AWARDS

Bangladesh Blockchain Olympiad 2024 | [Link](#)

Sep 2024

Honourable Mention in Both AI Category & Blockchain Category

- Led the team to secure Honourable Mention out of 250+ teams nationwide, developing a comprehensive health app ecosystem powered by AI, featuring a medical diagnosis tool using deep learning models and an AI therapist with natural interruption and empathic voice features (ChatGPT API, Hume AI API).
- Designed MEDIBLOC, a blockchain-based medical prescription management system with Attribute-Based Access Control (ABAC) for secure sharing of prescriptions between hospitals, pharmacies, and patients.

Hello Yobo AI Hackathon 2024 | [Link](#)

May 2024

Second Runners up

- Led the team to secure 2nd runners-up out of 50+ teams, developing Athene, an offline LLM chatbot for Android using Mediapipe LLM Inference API. The app allowed users to download and run any LLM model on mobile CPUs without the need for NPUs, achieving an inference speed of 600 tokens/sec—surpassing industry standards at the time, even before Google’s local Gemini models were introduced.

Therap Javafest 2023 | [Link](#)

August 2023

Top 10 Finalist

- Led the team to reach the Grand Finale, securing a top 10 position out of 150+ teams, by developing a Fullstack Customer Management Application for small shops using Spring Boot and Angular. Integrated AI components, including leveraging LLMs and machine learning (ML) models, to track customer purchases and generate data analytics reports on revenue, forecasted revenue, and forecasted profit.

SUST Technovent 2023 | [Link](#)

Jan 2023

First Runners up

- Led the team to secure 2nd runners-up out of 170+ teams nationwide, in developing a blockchain-based authentication system for secure access control, utilizing RFID technology to protect industrial vaults. The custom-built JavaScript blockchain passed 69 test cases, ensuring robust and decentralized security measures.

HackNSU Season 3 | [Link](#)

Nov 2021

Second Runners up

- Led the team to secure 2nd runners-up out of 30+ teams nationwide, in developing Remedi, a telemedicine platform powered by an AI chatbot (Intelligent Machines API) to help patients self-diagnose based on their health symptoms, providing accurate potential diagnoses through an intuitive interface.

Physics Olympiad | [Link](#)

2020

National Participant

- Translated the official Physics Olympiad book for Category A and B from Bangla to English, contributing to accessible education for students participating in the Olympiad.
- Chosen to participate in the National Round of the Physics Olympiad after qualifying from the Divisional Round in 2017, 2018, and 2019.

Chemistry Olympiad | [Link](#)

2020

National Round 11th Place

- Achieved 11th place in the National Round of the Chemistry Olympiad, showcasing strong proficiency in chemistry and problem-solving.

Maths Olympiad | [Link](#)

2020

Jahangirnagar University First Place

- Secured first place in the Jahangirnagar University Maths Olympiad, showcasing exceptional mathematical and analytical skills.

ACTIVITIES

Director of Technology, BUET Cyber-Security Club

2023 – 2024

Bangladesh University of Engineering and Technology

- Organized workshops on various cyber-security topics and arranged Capture-the-Flag (CTF) competitions.

Student Mentor

2019 – 2024

Bangladesh University of Engineering and Technology

- Mentored several undergraduate students in research and university projects.
- Mentored around 20 high school students in informatics, physics and mathematical olympiads.

LANGUAGES

English: IELTS 8.0 (Reading: 8.5, Listening: 8.5, Speaking: 8.0, Writing: 7.5)

Bengali: Native Proficiency

PROGRAMMING SKILLS

Languages: Python, Java, C++, JavaScript, C, SQL, Shell Scripting

Databases: PostgreSQL, MySQL, MongoDB, Firebase

Web Development: Django, FastAPI, ReactJS, Flask, NodeJS, Spring Boot, HTML, CSS

Technologies & Tools: Git, GitHub, Docker, AWS (Amazon S3), Hyperledger Fabric

REFERENCE

Reyhaneh Jabbarvand

Assistant Professor, Computer Science and Engineering

University of Illinois Urbana-Champaign, Urbana, Illinois

reyhaneh@illinois.edu

Anindya Iqbal

Professor, Computer Science and Engineering

Bangladesh University of Engineering and Technology

anindya@cse.buet.ac.bd