

JAID MONWAR CHOWDHURY

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EDUCATION

Bangladesh University of Engineering and Technology (BUET)

February 2020 – March 2025

Bachelor of Science in Computer Science and Engineering

RESEARCH EXPERIENCE

Research Internship, IntelligentCATLab, University of Illinois Urbana-Champaign June 2025 – Present

Remote Research Intern advised by Prof. Reyhaneh Jabbarvand

- Co-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**.

RIC-BUET

March 2025 – Present

Research Assistant advised by Prof. Anindya Iqbal

- 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

June 2024 – Present

Remote Full Stack Engineer

- 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

RISE Research Grant

2023

Bangladesh University of Engineering and Technology

- Awarded the RISE Research Grant for outstanding research contributions and potential.

Dean's List Award, Merit Scholarship, and Admission Test Scholarship

2019 – 2024

Bangladesh University of Engineering and Technology

- Awarded after each term for academic excellence.

Second Runner-Up, DUITs IT Fest Hackathon

2014

Dhaka University IT Society

- Secured the second runner-up position for developing EmerApp.

PROJECTS (SELECTED)

Paging Framework and Scheduler for xv6 Operating System <ul style="list-style-type: none">Implemented a simple paging framework and a lottery scheduler for the xv6 OS.	2023
QCC - Tiny C Compiler GitHub <ul style="list-style-type: none">Built a tiny C compiler using C++ that translates C code into assembly code.	2022
4-Bit MIPS CPU GitHub <ul style="list-style-type: none">Built hardware and a virtual simulation for the CPU pipeline.	2022
Ray-Tracing in OpenGL GitHub <ul style="list-style-type: none">Implemented rasterization and a ray-tracing pipeline in C++ and OpenGL.	2023
CryptoSys - Basic Crypto-System for Secured Communication GitHub <ul style="list-style-type: none">Implemented a basic crypto-system utilizing AES and Diffie-Hellman algorithm.	2023
HTTP Server GitHub <ul style="list-style-type: none">Built a multi-threaded HTTP server using Java and socket programming.	2022
Microcontroller based Automated Traffic Signaling System GitHub <ul style="list-style-type: none">Built an automated traffic signaling system with Arduino.	2022
Gradery - An Online CMS GitHub <ul style="list-style-type: none">Developed an online course management system (CMS) for BUET CSE.	2022
KagOJ - An Online Judge GitHub <ul style="list-style-type: none">Co-developed an online judge platform for coding practice and contests.	2023
Bounce Game for Windows GitHub <ul style="list-style-type: none">Built the desktop version of the popular mobile game, Bounce.	2019
EmerApp - Helper in Emergency <ul style="list-style-type: none">Developed an Android app to assist users during emergencies.	2014

ACTIVITIES

Director of Technology, BUET Cyber-Security Club <i>Bangladesh University of Engineering and Technology</i> <ul style="list-style-type: none">Organized workshops on various cyber-security topics and arranged Capture-the-Flag (CTF) competitions.	2023 – 2024
Student Mentor <i>Bangladesh University of Engineering and Technology</i> <ul style="list-style-type: none">Mentored several undergraduate students in research and university projects.Mentored around 20 high school students in informatics, physics and mathematical olympiads.	2019 – 2024

LANGUAGES

English: TOEFL 111/120 (Reading: 29, Listening: 26, Speaking: 29, Writing: 27)
Bengali: Native Proficiency

SKILLS

Programming: C/C++, C#, Bash, Java, Python, SQL, JavaScript, HTML/CSS, R, \LaTeX , Kernel Hacking and eBPF
Frameworks: Node.js, Express.js, React
Miscellaneous: Vim, Emacs, Git, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, pandas, NumPy, Matplotlib

REFERENCE

Ryan Huang

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