

Abir Muhtasim

+880 1725 012759 | auntor505@gmail.com | [Portfolio](#) | [LinkedIn](#) | [GitHub](#)

EDUCATION

Bangladesh University of Engineering and Technology (BUET)

Feb 2020 – Mar 2025

B.Sc. in Computer Science and Engineering

- CGPA: 3.87/4.00

RESEARCH EXPERIENCE

Multilingual Evaluation of LLM-based Web Agents

Feb 2024 – Aug 2026

Undergraduate Thesis, BUET | Supervisor: Dr. Rifat Shahriyar

Paper submitted to NSysS 2026 (under review)

- Studied how well HTML-based LLM web agents work in seven languages: fine-tuned XLM-RoBERTa and mT5 agents on translated Mind2Web tasks, and tested Gemini, GPT-4o mini, and DeepSeek-V3 on live websites.
- Built a benchmark that translates full Mind2Web pages while keeping their structure identical, so language is the only variable, and tested a Gemini agent on it and on live localised websites.
- Found a small drop in step accuracy (1.5 points, mostly from typed values), no significant gap on live websites, and up to $2.4\times$ higher token cost for non-English pages.

Deepfake Face Detection – IEEE Signal Processing Cup 2025

Aug 2024 – Jan 2025

BUET | Supervisor: Dr. M. Saifur Rahman

Preprint: [arXiv:2501.16704](https://arxiv.org/abs/2501.16704) | Submitted to NSysS 2026 (under review)

- Worked on an attention-driven deepfake face detector that combines three complementary vision models (MaxViT, CoAtNet, EVA-02) by majority vote.
- Trained each model in two stages with supervised contrastive learning, and added 12,200 synthetic deepfakes made with seven recent methods to the training data.
- Achieved 95.83% validation accuracy and 0.9239 AUC on the 395,609-image hidden test set; first runner-up in SP Cup 2025 as Team Straw Hats.

LLM-Generated Code Detection

Aug 2024 – Nov 2024

Course Project, Machine Learning Sessional, BUET

Preprint: [arXiv:2604.16058](https://arxiv.org/abs/2604.16058) | [Hugging Face](#)

- Developed LLMSniffer, a classifier that detects whether a piece of code was written by a human or an LLM.
- Fine-tuned GraphCodeBERT in two stages: supervised contrastive learning to separate human and LLM-written code in embedding space, then an MLP classifier on comment-stripped code.
- Improved accuracy over prior work from 70% to 78% on GPTSniffer and from 91% to 94.65% on Whodunit.

PROFESSIONAL EXPERIENCE

Shipday Inc.

Jul 2025 – Present

Software Engineer

California, USA (Remote)

- Working at a last-mile delivery AI startup, focusing primarily on backend services, APIs, and third-party integrations.
- Built and improved integrations with delivery providers (DoorDash, Uber, Roadie, and others) for delivery fulfillment, order status sync, and live driver tracking.
- Extended ordering and POS integrations (Toast, Shopify, Lightspeed) and migrated them to a newer architecture.
- Developed a B2C app that connects end customers with third-party delivery providers for food and parcel delivery.
- Built direct-mail marketing features that let customers and the sales team send postcard and flyer campaigns to their audiences and prospective leads.
- Built internal LLM-based sales tools: one creates structured lead summaries from business data and web search, and another scores sales-call transcripts against defined metrics.

Technologies: Java, Spring Boot, MySQL, PostgreSQL, MongoDB, RabbitMQ, Redis, AWS, Python, React, Astro

PERSONAL PROJECTS

MdFly Go, PostgreSQL, Cloudflare

GitHub | Live | Mar 2026

- Command-line tool that publishes a local Markdown file, along with the images, pages, and folders it links to, as a shareable web page.
- Serves both rendered HTML and byte-exact raw content for scripts and AI agents, using SHA-256 content-addressed storage and CDN caching.

CTFe SvelteKit, PostgreSQL, Supabase

GitHub | Live Demo | Jan 2024

- Full-stack Capture the Flag platform where users can host their own contests, form teams, and compete.
- Prevents flag sharing by randomly giving teams different variants of a challenge; a team that submits another team's flag is banned automatically.

C-- C++, Flex, Bison

GitHub | Live Demo | Nov 2022

- Compiler that translates a subset of C into Intel 8086 assembly, covering lexical analysis, parsing, semantic checks, and code generation.
- Compiled to WebAssembly with Emscripten so it runs in the browser.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, Go, SQL

Tools and Frameworks: Spring Boot, Express.js, React, Astro, RabbitMQ, Redis, PyTorch

Databases and Cloud: MySQL, PostgreSQL, MongoDB, AWS, Cloudflare

AWARDS AND ACHIEVEMENTS

- Runner-up, IEEE Signal Processing Cup 2025.
- 2nd Place, iCTF 2024, an AI-themed cybersecurity competition organized by UC Santa Barbara.
- 3rd Place, IUT ICT Fest 2024 – Capture the Flag (100+ teams).
- Champion, BUET CSE Fest 2023 – Game Jam (30+ teams).
- Won the BUET Rising Team award at BUET CSE Fest 2023 – Capture the Flag (4th place out of 120+ teams).
- 1st Place, Intra-BUET Programming Contest 2023 (40+ teams) and Intra-BUET CTF 2023 (30+ teams).
- Ranked 30th in the ICPC Asia Dhaka Regional 2024 Preliminary; qualified for the onsite round.
- Dean's List Award and University Merit Scholarship

LEADERSHIP AND OTHER ACTIVITIES

- **President, BUET Cyber Security Club** (May 2024 – January 2025): Organized technical workshops and a national-level CTF, contributing to improved competitive cybersecurity performance at BUET.
- **Core Organizer, BUET CSE Fest 2024:** Led the CTF cybersecurity competition and Game Jam, and supported other events through coordination and volunteering.