

Md Saif Ahmed

Software Engineer | Backend & Full-Stack (Go, Python, TypeScript) | Competitive Programmer | Security

saifahmedsakib@gmail.com | +880 1701-667488 | Dhaka, Bangladesh (UTC+6) | Open to remote | saif-sakib.github.io/portfolio
linkedin.com/in/saifahmedsakib | github.com/saif-sakib | codeforces.com/profile/Saif_Ahmed008

Software engineer (CSE, MIST, graduating 2027) who builds and runs production software: **sole engineer of Hasnahena**, a live finance platform (Go, Next.js, PostgreSQL) used by real members since August 2026. Also a competitive programmer (38th at ICPC Asia Dhaka Regional 2025, 1700+ problems), CTF player and President of the MIST Computer Club.

Live	269	38th	5th
finance platform since Aug 2026	Go tests • load test ~180/s	ICPC Asia Dhaka Regional 2025	Cyber Drill 2025 CTF

EDUCATION

B.Sc. in Computer Science & Engineering 2023 – 2027 (Expected)
Military Institute of Science and Technology (MIST), Dhaka | CGPA 3.58 / 4.00 (up to Level-3, Term-2)
Higher Secondary Certificate (HSC) | Govt. M. M. College, Jashore | GPA 5.00 / 5.00 2022

EXPERIENCE

Sole Software Engineer — Hasnahena, Interest-Free Cooperative Finance Platform Mar 2026 – Present
Independent project, in production | hasnahenafoundation.com | [GitHub](#) | Go (chi, pgx), Next.js 16, TypeScript, PostgreSQL, Docker

- Digitises the passbook of a community cooperative in Jashore: deposits, interest-free loans with guarantors, donations and disputes for members, workers and admins, in English and Bengali. **Live with real members since Aug 2026.**
- Correctness:** the Go API (60+ endpoints) runs every balance change in one PostgreSQL transaction with row locks; money is stored as integers under CHECK constraints, with an append-only audit log.
- Security:** RBAC, bcrypt, JWT with server-side revocation, rate limiting with login lockout, anti-enumeration responses, CSP and secret scanning in CI.
- Testing:** 269 Go tests, including race-detector integration runs and 400k-iteration money property tests; Playwright end-to-end tests; a load test at ~180 postings/s that reconciles exactly.
- Operations:** encrypted daily backups to Cloudflare R2 with a restore drill in CI (RPO 24h, RTO under 1h); Sentry, Prometheus and UptimeRobot monitoring; 45 architecture decision records and runbooks.

Industrial Trainee, JB Connect Ltd (JBC) 2026 | 4 weeks
Industry sessions on DevOps, backend engineering and AI/ML; tasks with the company’s teams

- Team AI content-generation app (FastAPI, React): set up the backend’s router → service → repository layers, env-driven settings, error-to-HTTP handlers, Alembic and Docker dev setup.
- Built the POST /api/v1/generate endpoint with a mock AI client behind an injectable FastAPI dependency; shipped through pull requests.

PROJECTS

QuestBoard — Gamified Q&A Platform for STEM Students (Team) [GitHub](#)
Python, FastAPI, SQLAlchemy, PostgreSQL (Supabase), Anthropic Claude API, Codeforces API, pytest, Flutter, Render

- Q&A app where students post “quests” with point bounties. **Wrote all current server code:** FastAPI (~40 endpoints) and a Postgres schema with race-safe voting, trigram search, RLS and a points ledger updated in one transaction.
- AI hints from the Anthropic Claude API (rate-limited, refunded on failure); Codeforces API daily challenges and handle verification; **70 pytest tests** run in CI against a real Postgres.

LocalFix — Civic Engagement Platform (Team) [GitHub](#)
React (Vite), Node.js, Express.js, Oracle Database (PL/SQL), JWT, bcrypt, Helmet, Mapbox GL

- Complaint management system where citizens report civic issues (roads, waste) to authorities; role-based access control and optimized Oracle SQL queries **cut data retrieval latency by 40%**.
- Wrote ~95% of the Express API (Helmet, rate limiting, validation, JWT) and the Oracle schema: **14 triggers, 3 stored procedures, 3 views, 27 indexes**; plus a large share of the React client.

HallBridge — Digital Hall Management System (Team) [GitHub](#)
Next.js 16, React 19, TypeScript, MongoDB (Mongoose), Tailwind CSS, Supabase, Google OAuth 2.0

- Seat allocation, billing and notices for **500+ residents**, with student, staff and admin dashboards and a predictive meal planner that brought food wastage to near-zero.
- Wrote ~64% of the API and ~81% of the data models; **Google OAuth 2.0** sign-in with a CSRF state cookie, password reset with expiring tokens, and compound indexes with lean, projected reads.

MCC Website — MIST Computer Club Platform (Team, in production) [GitHub](#)
Next.js, Bun, Hono, PostgreSQL, JWT, Supabase, Docker Compose, GitHub Actions

- The club’s live platform. Built the **alumni directory end to end**: public listing, JWT-protected admin CRUD, Postgres migrations and Next.js pages; plus the landing-page admin.

- Hardened contest-report rooms: input validation, idempotent adds and a **broken access control fix**, so read endpoints require an admin instead of any signed-in user.

BruteBuddy — Automated Security Testing Tool

[GitHub](#)

Python, requests, ThreadPoolExecutor, CLI

- CLI for **automated fuzzing** and brute-force testing of login endpoints: multi-field and generated payloads, custom headers and cookies, automatic re-authentication; parallel requests run **3× faster**.

GyanTori — Peer-to-Peer Book Sharing (Team)

[GitHub](#)

Java, JavaFX (FXML), Maven, MongoDB

- Desktop virtual library for **500+ students** to lend, borrow and catalog books, with a MongoDB schema for inventory relationships and transaction history.

TECHNICAL SKILLS

Languages	Go (Golang), Python, TypeScript, JavaScript, C++ , Java, Dart, SQL, Bash
Backend	Go (chi, pgx), FastAPI, Node.js, Express.js, Hono, Prisma, SQLAlchemy, REST APIs, SSE, JWT, OAuth 2.0
Frontend	React, Next.js, Tailwind CSS, shadcn/ui, MUI, TanStack Query, next-intl, Flutter, JavaFX
Databases	PostgreSQL (transactions, locking, constraints, triggers), MongoDB, Oracle (PL/SQL), MySQL
Cloud & DevOps	CI/CD (GitHub Actions), Docker (GHCR), Git, Linux, Vercel, Render, Neon, Cloudflare, Sentry, Prometheus
Testing	Go testing (unit, integration, race, property, load), Playwright, Vitest, pytest, golangci-lint, ESLint
AI / LLM	Anthropic Claude API, Vercel AI SDK, OpenAI-compatible APIs
Security	OWASP Top 10, penetration testing, Burp Suite, Wireshark, RBAC, CSP, gitleaks, secure coding
Core CS	Data structures & algorithms (graphs, DP, segment trees), OOP, concurrency control, system design

COMPETITIVE PROGRAMMING

Codeforces Specialist (max 1514) CodeChef 3-Star (max 1722) 1700+ problems solved (CF, CodeChef, LeetCode, CSES, AtCoder)		
ICPC Asia Dhaka Regional 2025 (<i>univ. teams</i>)	38th	BUP IAUPC 2025 Champion / 28
DUET IUPC 2025	16th / 137	NSUCEC Cybernauts IUPC 2026 16th / 159
DUET IUPC 2026	24th / 139	CUET IUPC 2025 28th / 131
NDUB IUPC 2026	32nd / 85	Meta Hacker Cup 2024 Round 2
+10 more: ICPC Asia Dhaka Regional 2024, two ICPC preliminaries and 7 IUPCs (2024–26). All results: saif-sakib.github.io/portfolio		

LEADERSHIP & TEACHING

President, MIST Computer Club

Jun 2026 – Present

Vice President (May 2025 – Jun 2026) | Executive Member (May 2024 – May 2025)

- Lead club strategy and mentor 15+ core members who deliver 10+ technical events a year; direct ICPC preparation camps and workshops reaching **200+ students**.
- As Vice President, coordinated programming workshops, contest initiatives and training for junior members.

Competitive Programming Instructor, MIST Computer Club

May 2024 – Present

- Mentor **50+ junior students** in algorithms and contest strategy with an 80% retention rate; curated 20+ problem sets and mock contests, helping teams advance in ICPC preliminary rounds.

Web Security Instructor, MIST Cyber Security Club

May 2024 – Jun 2026

- Ran hands-on OWASP Top 10 workshops with real-world exploitation scenarios; trained **30+ students** in penetration testing and secure coding. Also Associative Member (May 2024 – Jun 2025).

Executive Director, Mentor Committee | coordinated security mentoring initiatives and learning tracks

Jun 2025 – Jun 2026

Hackathons: MIST Intra Hackathon 2025 | BUP CSE Fest 2026 Hackathon (onsite)

CYBERSECURITY & CTFS

Cyber Drill 2025 (WTISD Hackathon)	5th	Bugcrowd USA CTF 2025 34th global
SMP CTF 2024	13th	BUET CTF 2024 (final round) 18th

Also 18th at the Cyber Raid 2025 and DIU Cybercon CTF 2025 finals, BCS ICT Fest CTF 2025 and BUP CTF 2025.

Practice: PortSwigger Academy 70+ labs (10+ categories) | PicoCTF 67+ | TryHackMe 29 rooms | OverTheWire Natas

Training: Hands-on Ethical Hacking and Security Analysis (MIST Cyber Security Club) | eShikhon Ethical Hacking Live Course

TOOLS & SCRIPTS

- **Rank-Raven** (*Python, Selenium, BeautifulSoup, ReportLab*): Codeforces activity reporter that generates styled PDF reports.
- **upsolve_tracker** (*Apps Script, Sheets, Codeforces API*): schedules near-miss problems, times solves, detects AC automatically.
- **Code-Library** (*C++ , LaTeX, Python*): MIST_EagleForces ICPC team notebook with a script that builds the PDF.
- **Faculty-Evaluation** (*Python, Selenium*): automates the university’s faculty evaluation form.