

AHMAD YOUSUF

SOFTWARE ENGINEER | BACKEND SYSTEMS | SECURITY RESEARCH

Dhaka, Bangladesh | contact@0xAhmadYousuf.com

Portfolio: <https://www.ctforion.com> | <https://0xahmadyousuf.com> | GitHub: <https://github.com/0xAhmadYousuf>

PROFESSIONAL SUMMARY

Software engineer with experience in backend development, database-backed applications, product projects, software testing, and security research. Works mainly with Python and PHP, APIs, SQL databases, search systems, and production debugging. Also works on independent projects in browser privacy, payment workflows, CTF platforms, and cryptography. Currently contributes to software and IoT-related work at Zickrock and backend development at RightBiz.

TECHNICAL SKILLS

Languages and frameworks: Python, PHP, JavaScript, Django, Flask, SQL, Bash

Backend: REST APIs, authentication, payment integrations, webhooks, debugging, application maintenance

Databases and search: MySQL, MariaDB, PostgreSQL, SQLite, Redis, Typesense; schema design and query analysis

Engineering tools: Git, GitHub, Docker, GitHub Actions, Linux, Playwright, Selenium

Focus areas: SaaS and workflow tools, access control, web application security, browser fingerprinting, applied cryptography, post-quantum cryptography research, IoT and education technology

PROFESSIONAL EXPERIENCE

Lead Software Engineer | Zickrock | Apr 2026 – Present

- Work on software and technical delivery for a startup focused on IoT projects and educational technology.
- Contribute to implementation, troubleshooting, and planning across software and connected-device initiatives.
- Work with the team to turn project requirements into practical technical tasks and deliverables.

Backend Developer | RightBiz | Oct 2024 – Present

- Develop and maintain backend features for business software, including API and database-backed functionality.
- Work with SQL data, search-related systems, and role-based access requirements.
- Investigate production issues by reproducing defects, reviewing logs or code changes, and narrowing down causes.

Django Developer / QA Test Engineer | TarunSoft | 2023

- Worked on Django backend features, REST APIs, and database-backed application functionality.
- Handled QA tasks including feature validation, defect identification, and reporting issues for correction.

SELECTED PROJECTS AND RESEARCH

TaskDash | <https://taskdash.online>

Team productivity and task-management project with crew-duty workflows. The product direction brings task tracking and team coordination into one place.

TracePrint | <https://traceprint.online>

Browser fingerprinting and browser-signal collection project developed as an alternative to FingerprintJS, with attention to lightweight collection and behavior in privacy-focused browsers.

PayRouter | <https://payrouter.online>

Payment orchestration project focused on connecting vendors with payment gateways through a consistent API and keeping vendor credentials isolated.

CTFOrion | <https://www.ctforion.com>

Rebuilt a platform for capture-the-flag and cybersecurity activities. Shared it with members of the Bangladesh CTF community for evaluation; formal adoption has not been claimed.

QudsLab and NextSSL | <https://qudslib.com> | <https://github.com/QudsLab/NextSSL>

QudsLab is an independent project focused on cryptography and security. NextSSL is an open-source cryptographic toolkit exploring conventional and post-quantum cryptographic components.

The Quantum Reset | <https://doi.org/10.5281/zenodo.19884292>

Published research on trust in post-quantum key generation, discussing entropy, seed derivation, and distributed trust.

EDUCATION

Master's degree in Islamic Studies | Madrasah | 2023

SELECTED CERTIFICATIONS AND ACTIVITIES

- SQL (Advanced) — HackerRank, 2023
- Python Developer — SoloLearn, 2022
- Ethical Hacker Essential — CodeRed, 2022
- TryHackMe learning paths and CTF participation, including CrewCTF, NahamCon, VishwaCTF, CyberYami, and OFPPT (2021–2023)