

Ahmed Mekkawi

Backend Developer

Professional Summary

Backend Engineer specialized in high-performance systems (Rust/Node.js) with a deep interest in distributed consensus and Linux internals. Proven track record of contributing to open-source and building production-ready decentralized applications.

Education

Physics & Computer Science at Damietta University

August 2023 - Present

Experience

Independent Engineering & Open Source. at Open Syntax

October 2024 - Present

Internships

Backend Engineer at ALX Africa

August 2023 - July 2024 • [↗](#)

- Implemented Linux utilities in C using syscalls, optimizing memory and file I/O
- Designed RESTful APIs and database schemas with Node.js, Python, and SQLAlchemy
- Optimized Nginx load balancing and caching, reducing response latency by 25% and increasing concurrent user capacity

Skills

Languages: Rust, TypeScript, Python, C

Backend Frameworks: Axum, NestJS, Express.js, Flask

Databases & Search: PostgreSQL, MySQL, MongoDB, MeiliSearch

Systems & DevOps: Linux/Unix, Nginx, Load Balancing, Docker, Podman, CI/CD, Shell Scripting, AWS EC2

Distributed Systems: Raft, Consensus Algorithms, Caching, Fault Tolerance

Projects

UltimateXO • [↗](#)

Core backend & DevOps contributor — implemented Rust server logic, maintained CI/CD pipelines, managed dependency upgrades, and ensured long-term project stability.

Lottery dapp (Solana) • [↗](#)

Designed and implemented Solana smart-contract logic in Rust (Anchor) with end-to-end TypeScript tests ensuring correctness and reliability.

Oha • [↗](#)

Contributed core infrastructure to a high-profile Rust load generator by authoring the official Docker image and optimizing CLI parsing for high-volume requests. Collaborated with maintainers to enhance deployment efficiency and cross-platform usability.

Personal Information

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Social Links

[LinkedIn](#)

[GitHub](#)

[Portfolio](#)

Languages

Arabic - Native

English - Proficient

Spanish - Beginner

Certificates

Software Engineering from ALX Africa

July 2024 • [↗](#)