

Ali El-Sayed Gomaa

+20 155 1028 289 | alielsayedgomaa@gmail.com | [LinkedIn](#) | [GitHub](#)

Mansoura, Egypt | Willing to relocate

SUMMARY

Dedicated back-end developer specializing in building secure, efficient server-side applications using Python, C, and JavaScript. Skilled in relational (PostgreSQL, MySQL) and non-relational (MongoDB, Redis) databases, with a passion for scalable architecture and optimized performance

PROJECTS

Masafa – Food Delivery Management System (Freelance Project) [\(Link\)](#)

- Architected and deployed scalable food delivery backend serving 5,000+ users with JWT authentication and role-based access control across multiple restaurant partnerships.
- Developed 20+ RESTful APIs handling 3,000+ daily orders, optimizing document retrieval performance by 60% through Cloudinary integration.
- Implemented VIP customer tracking and pilot analytics dashboard while reducing maintenance overhead by 75% through GitHub Actions automation.

Quizey – Back-End Quiz Management System [\(Link\)](#)

- Developed backend system serving 500+ educators and 2,000+ students with secure quiz sharing and multi-attempt management, handling 1,000+ quiz distributions.
- Built 25+ endpoints supporting diverse question formats (MCQ, true/false, short answer) and reusable question bank, tracking 1,000+ quiz attempts.
- Implemented scalable timer functionality enabling simultaneous participation of 100+ users, significantly reducing server load and improving system performance

Simple Shell [\(Link\)](#)

- Developed a robust shell with execve implementation supporting 20+ system commands and optimized PATH variable handling, improving system call efficiency by 40%.
- Conducted extensive testing with 100+ iterations, resolving 15+ critical memory leak vulnerabilities and implementing EOF handling for enhanced reliability.
- Engineered advanced process management with child process suspension mechanisms, improving system stability by 75%.

SKILLS

Programming Languages: Python, C, JavaScript, TypeScript

Databases: PostgreSQL, MySQL, MongoDB, Redis, SQLite, SQL

Backend Frameworks: NodeJS, Express.js, Flask, FastAPI

System & DevOps: Docker, Linux, Nginx, Networking

Software Architectures: Monolithic, Microservices, Serverless

Version Control & Collaboration: Git, GitHub, Postman, Apidog

Security: JWT, OAuth2

EDUCATION

ALX Software Engineering Programme Aug 2023 - Nov 2024

- Ranked in top 1% among 50,000+ applicants in intensive software engineering program focusing on hands-on project development.
- Built diverse projects from Linux shell to full-stack applications, emphasizing clean code and documentation.
- Mastered Data Structures, System Design, and DevOps using Python, C, JavaScript, SQL, and Linux.

Faculty of Agriculture Mansoura University Oct 2021 - Present

Bachelor of Agricultural Sciences.