

# Mohamed Gomaa

Egypt - Al Mansurah - Dakahlia

+201023154225 | [mo7amed.gom3a.7moda@gmail.com](mailto:mo7amed.gom3a.7moda@gmail.com) | <https://www.linkedin.com/in/mohamed-gomaa-626a18249>  
<https://github.com/mo7amedgom3a>

## Professional Summary

Backend Engineer with experience in designing scalable microservices, cloud-native deployments, and CI/CD pipelines. Skilled in FastAPI, .NET Core, and AWS, with hands-on DevOps expertise in Docker, Terraform, and Kubernetes. Enthusiastic about building reliable backend systems and automating deployments for high-availability environments.

## Education

### Faculty of Science, Assiut University

Bachelor of Science, Computer Science (Graduated)

• GPA: 3.2

Oct 2021 - Jun 2025

Egypt | Assiut

## Projects

### Easy Deploy Platform | [GitHub Repo](#)

Mar 2025 - May 2025

Graduation Project (Computer Science)

- Built a cloud-based PaaS enabling developers to deploy applications to AWS without DevOps knowledge.
- Automated infrastructure provisioning (95%) via Terraform and CI/CD deployment using GitHub Actions and AWS CodeBuild.
- Reduced deployment time by 80% through one-click automation workflows using FastAPI, MongoDB, Docker, and ECS.

### Programmer's Social Hub | [GitHub Repo](#)

Sep 2024 - Oct 2024

Portfolio Project ALX Software Engineering

- Built a microservices-based social media platform for programmers using .NET Core, Next.js, MongoDB, MySQL, Docker, and Kubernetes.
- Features include user authentication, post interactions, User Management, and event-driven architecture for real-time updates.
- Implemented user authentication, event-driven architecture, and both asynchronous and synchronous communications between services using RabbitMQ and gRPC, which reduced the latency by 75%.
- Deploying with Docker and Kubernetes reduces deployment time by 50%, ensuring service scalability and fault tolerance.

### School Management System | [GitHub Repo](#)

Jul 2024 - Aug 2024

ALX Software Engineering programme

- Built a full-featured school management system for administrators, teachers, and students.
- Role-based access simplifies administration and reduces repetitive tasks by 85%: admins manage accounts, teachers assign homework, and students track progress and grades.
- It is built using .NET, MySQL, REST API, and Next.js.

### Hospital Management System | [GitHub Repo](#)

Mar 2024 - Apr 2024

Assiut University

- Engineered a hospital system allowing patients to book appointments and track treatment history.
- Enabled doctors to manage prescriptions and appointments while enabling admins to oversee hospital operations, reducing administrative tasks by 90%.
- The system is built using .NET, MySQL, Razor Pages, and MVC architecture.

### Simple Shell | [GitHub Repo](#)

Jun 2023 - Jul 2023

ALX Software Engineering programme

- Built a Unix-like shell capable of executing commands, managing processes, and handling files.
- Implemented input parsing, environment variables, signal handling, and secure memory management.

## Skills

- **Programming Languages:** JavaScript, Node.js, C#, Python, C, C++, Typescript, Bash Script
- **Backend Development:** FastAPI, .NET Core, Flask, Django, Node.js (Express.js), Microservices, Event-Driven Architecture, API Development: RESTful, OAuth2, RabbitMQ, gRPC, Webhooks, WebSockets, Kong Gateway
- **DevOps & Cloud:** Git & Github, Linux, Docker, Nginx, HAProxy, Kubernetes, Terraform, AWS, Github Actions, Codebuild, Jenkins, Ansible, Puppet, Prometheus, DataDog, Cloudwatch, ECS, EKS
- **Databases:** SQL, MySQL, MongoDB, Redis, Amazon RDS, DynamoDB, Amazon Aurora

## Certifications

- **AWS Certified Cloud Practitioner:** issued: June 29, 2025  
Validated foundational knowledge of AWS Cloud concepts, core services, security, pricing models, and best practices. Demonstrated ability to explain the AWS Cloud value proposition and use cases for cloud infrastructure and services.
- **ALX Software Engineering Program:** ALX Africa | Completed [November, 2024]

## Languages

- Arabic (Native)
- English (B1)