

# MOHAMED ELATROUSH

Senior Software Engineer

(+20) 100 710 0589 • muhamed\_hatem1@aucegypt.edu • [LinkedIn](#) • [GitHub](#)

## Summary

Motivated and detail-oriented Software Engineer with 3+ years of experience in full-stack development, API optimization, and cloud-based solutions. Skilled at building scalable backend systems, improving performance (up to 4x), and delivering production-grade applications serving thousands of users. Proven ability to design robust REST APIs, implement microservices orchestration, and streamline workflows through automation. Thrives in agile environments with a focus on clean code, cross-timezone collaboration, and impactful delivery across the full SDLC.

## CORE COMPETENCIES

Tech Leadership & Mentorship

Software Architecture & System Design

Agile & DevOps Practices

Strategic Planning & Stakeholder Management

CI/CD & Cloud Infrastructure

Full-Stack Engineering: Django Rest · ReactJS · NextJS

## Professional Experience

### Octo Financial Services

Cairo, Egypt

#### Senior Software Engineer

09/2022 - Present

- Optimized APIs to achieve a 4x performance boost via ORM enhancements, pagination, and Redis caching.
- Led transformation of microservices to an orchestration control flow model, improving coordination for 6K+ users.
- Collaborated in an agile team to design and implement backend features such as user onboarding (KYC), credit enhancements, and money reconciliation, serving 6K+ users on AWS.
- Enhanced code quality through unit testing, documentation, and code reviews.
- Refactored core systems to enhance flexibility, scalability, and maintainability.
- Debugged and resolved 30% of pre-production bugs with AWS CloudWatch.
- Tech: AWS, S3, Django Rest Framework, React, Docker, PostgreSQL, Python, Go, TypeScript, Tailwind CSS.
- Products: <https://getocto.io> | [Octo IOS](#) / [Octo Android](#)

### IBM

Cairo, Egypt

#### Data Integrations and Engineering Intern

12/2021 - 02/2022

- Planned and built solutions to move data from operational and external environments to the business intelligence, data warehouse, and data lake environments.
- Increased internship engagement by 10% by offering 2 data engineering courses.
- Job shadowed in a project with the **ACA** in Egypt using IBM's DataStage tools.

### Agile Technologies

Cairo, Egypt

#### Software Engineer Intern

07/2020 - 08/2020

- Studied the software development life cycle (SDLC).
- Developed a full-stack offline e-commerce web app using OutSystems, enhancing offline functionality for 10+ users.
- Studied the complete SDLC framework, completing modules to support project deliverables at Agile Technologies.

## Education

### The American University in Cairo

Cairo, Egypt

Bachelor of Science in Computer Engineering | GPA: 3.04 / 4.0

09/2015 - 05/2021

## Projects

### Employee Logging System

Japan

oGLOBAL-RAILWAY.COM

11/2024 - 03/2025

Built a full-stack employee system with Django REST and React, hosted on AWS EC2. Managed 100+ users with JWT and role-based access. Created a 30+ endpoint REST API supporting multi-timezone (Egypt & Japan). Developed a React dashboard and systematized Excel timesheet reporting with branding.

- Increased repository collaboration by 10% through managing {2} GitHub projects.

## Projects

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### E-Care - Thesis project

Cairo, Egypt

2021

Created a healthcare system for elderly, integrating Fitbit, BLE, and mobile apps (Android/iOS). Indoor localization uses Firebase. A machine learning model trains the fall detection feature.

- Project Repository: <https://github.com/Elderly-Care/Ecare>

## Languages & Courses

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**Language** — English (fluent), Arabic (native)

**Courses** — Machine Learning A-Z (Udemy) | Deep Learning A-Z: DL, AI in Python & AWS + LLM Prize (Udemy) | iOS & Swift - The Complete iOS App Development Bootcamp (Udemy) | IBM Systems and Solutions Architect (Coursera)