

MOHAMED AL BALKHI

Full Stack Software Engineer

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EXPERIENCE

Full Stack Software Engineer

Freelancing

04/2025 - Present Remote

- Architected and deployed a **serverless, generative AI** platform on **GCP** using **LangChain**, Gemini API, and a Flutter frontend
- Rapidly developed a full-stack **e-commerce** solution **React/RN** on **Supabase**, delivering **over 60%** of core functionality in a **16-day sprint**
- Optimized and enhanced a legacy **.NET WPF application**, resolving performance bottlenecks and shipping a **custom QR code** invoicing module

Saudi Arabia Solutions Developer

AITI SA

03/2025 - 04/2025 Makkah, Saudi Arabia

- Engineered and maintained custom Point-of-Sale **POS** modules using **Java Swing** to meet specific client operational needs
- Developed critical invoice integration tools using **.NET Core** and **WPF**, ensuring full compliance with regional tax authority regulations
- Architected and developed a high-fidelity prototype for "**Atty**," a mobile platform for connecting clients with home maintenance professionals, engineered a scalable backend using **.NET Core Aspire** and two cross-platform mobile apps.

Full Stack Software Engineer

Datos

09/2024 - 12/2024 Damascus, Syria

- Delivered end-to-end features for the 'Lahloob' food delivery platform, enhancing overall application functionality and user experience using ASP.NET Core and Flutter
- Managed the full deployment lifecycle and administration for multiple 'Lahloob' web projects using IIS, ensuring high availability and performance
- Contributed significantly to the migration and refactoring of legacy backends to modern ASP.NET Core versions, **improving business-critical API response times by ~20x (30-100 RPS => 1000-2000 RPS in best scenarios)** and increasing **development speed by 50%.**

Flutter Developer

Datos

07/2024 - 09/2024 Damascus, Syria

- Contributed to the development of three distinct Flutter applications (Client, Partner, Driver) for the 'Lahloob' delivery ecosystem
- Applied BLOC and Clean Architecture principles to build and integrate features

EDUCATION

Bachelor's degree - Software & Information Systems Engineering

Syrian Private University

10/2020 - 03/2025 Damascus, Syria

- Graduated With a GPA of **3.59/4.00** or **91.80%**
- Achieved **1st place** ranking in the college cohort for **7 of 9** semesters.
- Completed the **5-year** degree program ahead of schedule in **4.5 years**.

SUMMARY

Highly skilled Full Stack Software Engineer with deep expertise in .NET and Python (Django/FastAPI) environments. Specialized in building scalable microservices, architecting generative AI solutions, and implementing CI/CD practices on cloud platforms like GCP and AWS.

LANGUAGES

Arabic

Native



English

Proficient



SKILLS

Backend Development

.NET Core

Django

Node.js

FastAPI

Caching

Microservices

Pub/Sub

REST APIs

Cloud & DevOps

Git

Google Firebase

IAC

EC2

GCP

Linux

AWS

Serverless

Amazon S3

Docker

Misc.

Agile Scrum

SQL/NoSQL

NLP

Scripting

React

RAG Pipelines

Flutter

E-Commerce

Redis

PROJECTS

Darsify (AI-Powered Learning Assistant)

📅 06/2025 - Present

An AI-powered mobile study companion designed to enhance learning efficiency through generative AI. The platform is architected as a scalable, serverless microservices system on Google Cloud Platform, providing intelligent tools and a conversational interface via a cross-platform Flutter application.

- Engineered a sophisticated **RAG** (Retrieval-Augmented Generation) pipeline using **LangChain**, **LangGraph**, and the **Gemini API** to provide users with context-aware answers from their documents.
 - Deployed the entire backend on a serverless infrastructure using **GCP Cloud Run**, **Pub/Sub** for asynchronous tasks, and **Terraform** for Infrastructure as Code **IaC**.
 - Built a responsive, cross-platform mobile application using **Flutter** and the **Cubit** state management library, ensuring a clean, layered architecture for maintainability.
 - Integrated **Neon DB PostgreSQL** for primary data storage and **Redis** for caching to ensure high performance and low-latency responses.
 - Utilized **Firebase Firestore** for content management related data.
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Rapid-Prototype E-Commerce Platform

📅 08/2025 - 09/2025

A full-stack e-commerce solution architected for extreme development velocity, featuring a complete back-office dashboard and a client facing mobile storefront. The project demonstrated the ability to rapidly deliver a complex, feature-rich application, with **over 60%** of core functionality built and deployed in a **16-day sprint**.

- Architected the entire **backend on Supabase**, leveraging **PostgreSQL**, Row Level Security policies, and serverless **Edge Functions** to handle business logic.
 - Constructed a comprehensive web-based management dashboard using **React Vite** for store owners to manage products, inventory, and orders.
 - Engineered an advanced, automated image processing pipeline using Supabase Storage that handled smart cropping, background removal, and conversion into multiple **web-optimized formats (.webp)**.
 - Developed the customer-facing, cross-platform mobile storefront using **React Native** and **Expo**, providing a seamless shopping and checkout experience.
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AgileMeets (Graduation Project)

📅 10/2024 - 02/2025

AI Powered Agile-Focused Online Meetings & Project Management System Designed and developed a scalable, **microservices-based** platform to streamline online meetings and project management, leveraging **AI** for enhanced productivity. The system was built using a variety of technologies, including **ASP.NET Core**, **Django**, **Node.js**, and **Flutter**, and followed best practices in software architecture and design.

- Drove the development and integration of key modules, including notifications, real-time meetings, and an AI-powered reporting engine, directly enhancing user engagement and functionality.
 - Spearheaded the deployment strategy by **Dockerizing** all microservices and configuring auto-scaling pipelines on **Fly.io** and **AWS EC2**, ensuring optimal performance under varying loads.
 - Self-hosted and integrated **OpenVidu**, an open-source meeting service, with our custom meeting service to enable seamless video conferencing.
 - Built a **Flutter-based** mobile app using a **layered architecture** with **Cubits**, incorporating all necessary features and screens for a smooth user experience.
 - Utilized **Amazon S3** for bulk storage of recordings and shared objects across microservices.
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Optilearn AI - An Intelligent Recommendation System for Knowledge Restoration and University Courses

📅 02/2024 - 09/2024

Worked on the full lifecycle of Software Engineering from Requirements Elicitation until Testing and Deployment, including **research work** reading and evaluating multiple scientific papers about different recommendation techniques.

- Drove the Constructed a robust backend using Django (**DRF**) with **Redis** and **Celery** for asynchronous task processing, complemented by a responsive React.js frontend.
- Managed containerization by writing custom **Linux scripts** and **Docker-compose** files for deployment across AWS EC2, **Azure VM**, and **DigitalOcean** instances.
- Engineered a course recommendation engine integrated with the Udemy API, leveraging **NLP** techniques to provide intelligent suggestions from a library of **over 140,000 courses**.