

Mohammad Ghareb

Software Engineer • Full Stack Developer • DevOps

📍 Beirut, Lebanon 📞 (+961) 81 695 065 ✉️ mohammadghareb35@gmail.com
[linkedin.com/in/mohammad-ghareb](https://www.linkedin.com/in/mohammad-ghareb) github.com/mohammadghareb lefoodai.com

PROFESSIONAL SUMMARY

Software Engineer with 5+ years of experience in full-stack development, cloud infrastructure, and DevOps. Experienced in designing and deploying scalable systems on AWS and Oracle Cloud, building CI/CD pipelines, and containerizing services with Docker and Kubernetes. Independently built an end-to-end AI system for Lebanese food export quality inspection, combining computer vision, real-time object detection, and LLM-generated compliance certificates, deployed live on AWS.

PERSONAL PROJECTS

LebFood AI — Lebanese Food Export Quality Inspector • 2026 lefoodai.com | github.com/mohammadghareb/lefood-ai

AI-powered food quality inspection system for Lebanese export producers. Built independently while working full time.

- ▶ Trained a YOLOv8 object detection model on 14,591 labeled images to classify fresh vs rotten produce, achieving **99.5% mAP50**.
- ▶ Built a **FastAPI backend** that runs real-time inference with OpenCV preprocessing and ByteTrack object tracking across video frames.
- ▶ Integrated **Claude API** (LLM) to automatically generate bilingual Arabic/English quality certificates from detection results.
- ▶ Deployed the full stack on AWS EC2 using Docker Compose, with ECR image storage and **GitHub Actions CI/CD** pipeline.
- ▶ Implemented JWT authentication, PostgreSQL inspection logging, and an active learning queue for continuous model improvement.

Stack: Python • YOLOv8 • FastAPI • OpenCV • React • PostgreSQL • Docker • AWS EC2 • ECR • GitHub Actions • Claude API

WORK EXPERIENCE

Software Engineer | **NavLeb** • Aug 2024 – Present

- ▶ Developed and maintained scalable backend and frontend applications using Angular and Express.js, integrating third-party APIs.
- ▶ **Led end-to-end cloud migration** from AWS to Oracle Cloud Infrastructure (OCI) — planning, execution, and post-migration stabilization.
- ▶ Pre-migration: managed containerized microservices on Amazon ECS alongside EC2, S3, RDS, and related AWS services.
- ▶ Post-migration: re-architected microservices on **Oracle Kubernetes Engine (OKE)**, managing pods, deployments, and cluster configuration.
- ▶ Provisioned and managed infrastructure on AWS and OCI using **Terraform** for infrastructure-as-code (IaC).
- ▶ Deployed and maintained product for an international client using Docker and Grafana for monitoring and visualization.

Software Engineer / DevOps | **Nebulane LLC** • Sep 2023 – Jul 2024

- ▶ Developed **Python monitoring** scripts for custom metrics with AWS CloudWatch.

- ▶ Implemented and managed core AWS services: S3, CloudFront, Route 53, ASG, EC2, RDS, ElastiCache, and EFS.
- ▶ Built and maintained **CI/CD pipelines** using AWS CodeCommit, CodeBuild, CodeDeploy, and CodePipeline for React.js projects.
- ▶ Designed scalable infrastructure with EC2, ASG, ALB, and target groups for Magento2 and WordPress deployments.
- ▶ Configured security groups and **IAM policies** to enforce least-privilege access controls on AWS resources.

Full Stack Developer | Et3 Labs S.A.L • Mar 2021 – Mar 2023

- ▶ Built web and mobile applications using React Native, ReactJS, NextJS, and ExpressJS.
- ▶ Built RESTful backend APIs using Node.js and Express; administered EC2, S3, RDS, and CloudWatch.
- ▶ Conducted security analysis and **penetration testing** using Burp Suite, MITM Proxy, and MobSF.
- ▶ Integrated Firebase services: Realtime Database, Crashlytics, and App Check.

Freelance Developer | EndnEt • Jan 2019 – Present

- ▶ Built and maintained responsive websites for small businesses and startups across Lebanon.

Lead WordPress Developer | Clerve S.A.R.L • Sep 2016 – Sep 2017

- ▶ Developed and maintained client websites; advised on technology solutions and monitored project performance.

TECHNICAL SKILLS

Languages	JavaScript, Python, PHP
AI / ML	YOLOv8, OpenCV, FastAPI, Ultralytics, Claude API, MLflow, Active Learning
Frontend	ReactJS, React Native, NextJS, Angular, HTML5, CSS3, Figma
Backend	Node.js, Express.js, FastAPI, REST APIs
Databases	PostgreSQL, MySQL, MongoDB, Oracle DB, Firebase Realtime DB
AWS	EC2, ECS, ECR, S3, RDS, CloudFront, Route 53, CloudWatch, CodePipeline, ASG, ALB, EFS, ElastiCache
Oracle Cloud	OCI, Oracle Kubernetes Engine (OKE), Oracle Database, Object Storage
Infra & DevOps	Docker, Kubernetes, Terraform, GitHub Actions, CI/CD Pipelines, Grafana, Git
Security	Burp Suite, MITM Proxy, MobSF, Security Groups, IAM
Mobile	React Native, Android Studio, Xcode

EDUCATION

BE in Computer & Communication Engineering | Islamic University of Lebanon • 2013 – 2018

Core: Java, C#, PHP, ASP.NET, Networking, Security, Electronics, DSP, Fiber Optic, GSM, Microcontroller (Arduino, Raspberry Pi).

Final Year Project: Smart Detection & Operation System for Injection Molding Machine (Machine Vision). Awarded **3rd place at LIRA 14** — Information & Communication Technology, under the patronage of the Lebanese Ministry of Industry and the National Council for Scientific Research.

Lebanese Baccalaureate – General Science | Zahya Salman High School • 2012 – 2013

LANGUAGES

Arabic — Native **English** — Professional