

Mohammad Houda

Tripoli, Lebanon | muhamad.houda@gmail.com | +961 76 344 842
linkedin.com/in/mohammad-houda | github.com/mohammadhouda | mohammadhouda.dev

Summary

Software Engineer with experience building AI agents, enterprise integrations, automation workflows, and scalable backend systems. Strong in Node.js, PostgreSQL, Prisma, Redis, REST APIs, n8n, and Next.js, with hands-on experience translating stakeholder requirements into production-ready technical solutions. Experienced in RAG, LLM integrations, distributed systems, real-time applications, and third-party API integrations, with a focus on reliability, scalability, and measurable business impact.

Education

Arab Open University - BS in Computer Science

Sep 2022 - Aug 2025

- GPA: 3.4/4.0

Experience

Solution Engineer - VAYACOM / DLVRD

May 2026 - Present

- Led technical discovery sessions with client stakeholders and IT teams to gather requirements, map existing systems, and translate business needs into 10+ proof-of-concept solutions using n8n, Zapier, REST APIs, and webhooks.
- Engineered and deployed 8+ AI agents and automated conversational workflows for sales, customer support, lead qualification, booking, and e-commerce use cases.
- Improved AI agent response accuracy by 70%+ through prompt engineering, knowledge base optimization, workflow refinement, and systematic testing.
- Launched the 27-page official DLVRD website (dlvrd.ai) using Next.js, TypeScript, and Sanity CMS, enabling internal teams to publish and update content without developer support.

Backend Developer - ISHTARI GROUP

Aug 2025 - Apr 2026

- Created and maintained 30+ RESTful API endpoints for product catalogs, filtering, and order features using Node.js, Express.js, PHP, and PostgreSQL, supporting thousands of products and sellers.
- Developed a Price Scanner system using Node.js and Firebase Cloud Messaging (FCM) to notify 15,000+ users in real time, improving engagement and price awareness across thousands of products.
- Optimized SQL queries handling tens of thousands of records, improving query performance and data consistency by more than 40%.
- Collaborated closely with front-end, QA, and product teams to deliver stable, production-ready features under real deadlines, reducing deployment errors by 30%.

Projects

Distributed RAG Web Crawler & Search Engine

Mar 2026 - May 2026

- Developed a queue-based web crawling and indexing system using Node.js, BullMQ, Redis, Cheerio, and Playwright, partitioning scraping, discovery, and indexing workloads across 3 independently scalable queues.
- Implemented 6 crawler reliability controls: robots.txt enforcement, per-domain rate limiting, retry/backoff strategies, dead-letter queues, content hashing, and page versioning, improving resilience and preventing duplicate processing.
- Architected a hybrid retrieval pipeline combining 2 retrieval strategies: PostgreSQL full-text search and pgvector HNSW embeddings, fused through Reciprocal Rank Fusion (RRF).
- Delivered a grounded RAG question-answering API with citations and SSE streaming, using heading-aware chunking, table extraction, and retrieval-based context generation.

Raise - Multi-Tenant AI Fundraising Platform

May 2026 - Sep 2026

- Created a multi-tenant fundraising SaaS platform using TypeScript, React, Express, PostgreSQL, Prisma, and Redis, supporting 6 core workflows: investor CRM, fundraising pipelines, commitments, tasks, secure document sharing, and team collaboration.
- Delivered an AI fundraising copilot with RAG, using OpenAI, pgvector, and LlamaParse to analyze fundraising documents, answer contextual questions with citations, and provide AI-assisted insights across startup data.
- Implemented secure tenant isolation and fine-grained RBAC using startup-scoped database access, JWT access and refresh-token sessions, Google OAuth, and separate restricted reviewer authentication.
- Engineered scalable asynchronous and real-time architecture using BullMQ, Redis, and SSE, powering AI processing, document parsing and embeddings, notifications, email delivery, and Gmail/Google Calendar integrations.

Certifications

- Forward MENA Junior to Mid Software Program
- AWS Cloud Practitioner
- IBM Front-End Developer

Aug 2026

Jul 2025

Nov 2023

Skills

Backend: Node.js, Express.js, REST APIs, PostgreSQL, Prisma, Redis, BullMQ, Firebase

Frontend: Next.js, React.js, TypeScript, JavaScript, Tailwind CSS, HTML, CSS

Tools & Cloud: Git, Docker, Postman, Supabase, Sanity CMS, Puppeteer, Playwright, Jest, AWS

AI & Automation: AI Agents, RAG, LLM APIs, Prompt Engineering, pgvector, Vector Search, n8n, Zapier

Integration: REST APIs, Webhooks, WhatsApp Business API, Third-Party API Integration

Practices: System Design, Background Jobs, Authentication & Authorization, Agile Collaboration