IZZEDEEN ALFARRA

Software Engineer | Backend · Healthcare Interoperability · AI

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PROFESSIONAL SUMMARY

Node.js and TypeScript engineer promoted to Mid-Level within a year at Kayan Healthcare Technologies. Builds and runs production HL7 FHIR R4 e-claims systems and national platform integrations (Dhamani, FSA, NAPHIS) across KSA, UAE, Oman, and Qatar, plus AI features with LLMs, RAG, and OCR. Previously served 10,000+ daily users at 99.9% uptime and halved API response time. Ready to own services end to end and raise engineering quality across teams.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python
Backend: Node.js, NestJS, Express.js, REST APIs, Microservices, JWT Authentication, Swagger/OpenAPI, Unit Testing
AI Engineering: LLMs, RAG, OCR, AI Agents, Embeddings, Vector Databases
Healthcare Tech: HL7, FHIR R4, E-Claims, Claims Lifecycle, CPT, ICD, HCPCS
Databases & ORMs: PostgreSQL, MySQL, MongoDB, TypeORM, Prisma, Mongoose
DevOps & Monitoring: Docker, NGINX, IIS, Linux, CI/CD, AWS (S3), Grafana Loki, Git, GitHub
Frontend: React.js, Next.js, HTML, CSS, PWA **Currently Learning**: Cloud Architecture, Agentic AI

PROFESSIONAL EXPERIENCE

Mid-Level Software Engineer & Integration Officer **Aug 2026 – Present**
Kayan Healthcare Technologies *Remote – Dubai, UAE*

Promoted from Backend Engineer (Sep 2025 – Aug 2026); joined as Backend Intern (Aug 2025)

- Engineer Node.js, NestJS, and TypeScript services for FHIR e-claims processing and claims lifecycle management
- Integrated national healthcare platforms Dhamani, FSA, and NAPHIS across KSA, UAE, Oman, and Qatar using HL7 FHIR R4
- Built claim deduplication on the claims switch, preventing duplicate submissions from reaching payers
- Build AI features (LLMs, RAG, OCR) and REST APIs for an AI fraud detector and CPT/ICD/HCPCS code validation
- Run production: Docker deployments on NGINX and IIS, CI/CD releases, and Grafana Loki monitoring to keep live systems stable
- Support clients daily and join stand-ups, turning business needs into technical solutions

Backend Developer **Jun 2024 – Nov 2024**
DigiFly Group *Cairo, Egypt (Hybrid)*

- Built scalable backend systems supporting 10,000+ daily active users with 99.9% uptime
- Cut API response time by 50% (800ms to 400ms) through query and endpoint optimization
- Integrated secure payment gateways, increasing successful transactions by 25%
- Designed RESTful APIs with Swagger documentation, reducing developer onboarding time by 30%
- Implemented AWS S3/Cloudinary storage (5,000+ uploads/month); cut production bugs by 35% via CI/CD and code quality

JavaScript Developer Intern **May 2023 – Aug 2023**
Gaza Sky Geeks *Gaza, Palestine*

- Built responsive web interfaces with React.js and Next.js in an agile team, with regular code reviews and Git workflows

KEY PROJECTS

HL7 FHIR Integration Layer | *Node.js, TypeScript, HL7 FHIR* *Kayan Healthcare Technologies*

- Built a layer converting JSON payloads into HL7 FHIR messages compliant with Oman, UAE, and KSA e-claims standards

Post Office E-Claims Acceptance System | *Claims Platform, HL7 FHIR* *Kayan Healthcare Technologies*

- Built claim intake, validation, and routing on post office infrastructure in Oman, UAE, and KSA, reducing manual work

MegaTop Store API & Road App API | *Node.js, Express.js, Payments* *DigiFly Group*

- Built the megatop.com.eg e-commerce API (auth, payments) and a Google Play navigation app backend

EDUCATION

Bachelor's Degree in Software Engineering | *Al-Azhar University – Gaza, Palestine* *Expected 2026*

Diploma in STEM (IT), Web Development | *Mohammed AlNajjar School, Gaza* | GPA 4.0 (96%) *2019 – 2022*

CERTIFICATIONS, LEADERSHIP & LANGUAGES

Certifications: FHIR Fundamentals (Medblocks); Docker & Kubernetes (IBM); Linux & Shell Scripting (IBM); Duolingo English Test
Leadership: TAP Ambassador (2026 – Present), guiding job seekers; tech content creator with 5,600+ LinkedIn followers
Languages: Arabic (Native), English (Upper Intermediate)