

# Assem Omar

Full-Stack Software Engineer | .NET & Web Development

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## PROFESSIONAL SUMMARY

Full-Stack Software Engineer specializing in **ASP.NET Core**, **C#**, and **Angular**, with a strong foundation in Clean Architecture, CQRS, REST API design, and SQL/NoSQL databases. Shipped production backends for paying clients and built 7 end-to-end projects spanning e-commerce, AI integration, and enterprise APIs. Known for strong **problem-solving** skills, **collaborative** teamwork, and **attention to detail**. Currently advancing through ITI's Full-Stack .NET Diploma. Seeking a backend or full-stack engineering role to build scalable, maintainable software in a product-focused team.

## EDUCATION

- Information Technology Institute (ITI)** Menofia, Egypt  
*9-Month Professional Diploma — BI-Infused CRM Track (Full-Stack .NET)* Oct 2025 – Present
- professional diploma covering ASP.NET Core, Clean Architecture, enterprise CRM development, SQL Server, and production-grade software engineering practices
- Benha University — Faculty of Computer Science & AI** Benha, Egypt  
*Bachelor of Science in Computer Science — Very Good (GPA: 3.5 / 4.0)* Oct 2021 – Jun 2025
- Graduated 5th in the Department of Information Systems** out of the entire cohort

## PROFESSIONAL EXPERIENCE

- Arab River Medical — Full-Stack API Developer** Cairo, Egypt  
*Freelance Client Project | [armegypt.com](http://armegypt.com)* 2026
- Architected** a production-ready 3-tier ASP.NET Core Web API (.NET 10) with 15+ JWT-secured and public endpoints covering catalogs, leads, partners, contact management, and geo-based visitor tracking
  - Integrated** Hangfire for automated weekly CSV reports, MailKit SMTP, Geo-IP visitor tracking, rate limiting, BCrypt password hashing, FluentValidation, and AutoMapper
- TranslateXable — Backend Developer** Cairo, Egypt  
*Freelance Client Project | [translatable.io](http://translatable.io)* 2026
- Delivered a production-ready backend for a live paying client with credit-based translation, Paymob payment gateway integration, JWT authentication, and role-based access control
  - Built admin, blog, and translation history modules with complete Swagger documentation; fully Dockerized for zero-friction production handoff

## INTERNSHIPS

- DEPI — MERN-Stack Web Development Intern** Nasr-City, Egypt  
*6-Month Training Program* 2024 – 2025
- Engineered full-stack applications using React, Node.js, Express, and MongoDB with third-party REST API integrations
  - Delivered dashboards, task tools, e-commerce logic, and a Gemini API chatbot; applied Tailwind CSS and Material-UI
- Raya Information Technology — RPA Automation Engineer Intern** Maadi, Egypt  
*Internship* 2023 – 2024
- Designed and deployed end-to-end automation workflows using UiPath Orchestrator, cutting manual processing time by an estimated 40%
  - Built RPA scripts covering data extraction, validation, and report generation across core business processes

## PROJECTS

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### **TravelNest Agency System** | *Full-Stack, REST APIs, Docker, AI Integration* | **Graduation Project** | [GitHub](#)

- **Led** full-stack development collaboratively in a 3-person team, 30+ REST APIs for booking, authentication, admin dashboards, and trip management using layered MVC architecture
- **Integrated** AI-powered trip recommendations via third-party API and containerized full deployment with Docker

### **School Management System API** | *ASP.NET Core, Clean Architecture, EF Core, JWT, CQRS* | [GitHub](#)

- **Architected** a scalable REST API with 20+ endpoints across students, instructors, departments, and enrollments using 6-layer Clean Architecture and CQRS with MediatR
- **Secured** all endpoints with JWT authentication and RBAC; Localization for multi-language support

### **RAG System — Document Q&A** | *Node.js, Express, OpenAI Embeddings, ChromaDB, Vector Search* | [GitHub](#)

- **Engineered** a full RAG pipeline: document ingestion, chunking, OpenAI embedding generation, ChromaDB vector storage, and semantic retrieval across 100+ document chunks
- **Exposed** a REST /ask endpoint with context-restricted LLM responses to eliminate hallucinations; built a real-time browser UI for document Q&A

### **AI Chatbot** | *Vanilla JS, OpenAI API (GPT-4o-mini, DALL-E, TTS-1)* | [GitHub](#)

- **Built** a zero-dependency single-page chatbot supporting text chat, image generation (DALL-E), TTS voice output, and multimodal file/image prompt analysis via OpenAI APIs
- **Implemented** persistent chat history and dynamic API key/model configuration

## TECHNICAL SKILLS

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**Languages:** C#, TypeScript, JavaScript (ES6+), Java, Python, PHP, HTML5, CSS3

**Backend:** ASP.NET Core Web API, MVC, Blazor, Spring Boot, Spring Security, Node.js, Express.js

**Frontend:** Angular, React, Blazor, Tailwind CSS, Bootstrap, Material-UI, Redux

**Databases:** SQL Server, PostgreSQL, MySQL, MongoDB, SQLite – EF Core, Dapper, LINQ, Stored Procedures

**Architecture:** Clean Architecture, CQRS, SOLID Principles, Design Patterns, REST, Microservices

**AI / ML:** RAG Systems, LLM Fine-Tuning & Training, OpenAI API, Gemini API, ChromaDB, Vector Search

**DevOps & Tools:** Docker, Git, GitHub, CI/CD, Swagger, Postman, ApiDog, Linux, Visual Studio

**Personal Skills:** Problem-Solving, Collaborative, Fast Learner, Detail-Oriented, Flexible, Team Player

## LANGUAGES

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**Arabic:** Native

**English:** Fluent