Amira Hassan

Software Engineer | .NET Backend Developer

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GitHub | **Linkedin** | **Portfolio**

PROFESSIONAL SUMMARY

Performance-driven Backend Developer specializing in the .NET ecosystem and Clean Architecture. Highly proficient in designing scalable RESTful APIs, optimizing database performance, and implementing secure authentication (JWT/OAuth). Proven track record of delivering full-stack solutions across multiple frameworks including ASP.NET Core, Java Spring Boot, and Django. Passionate about system design, SOLID principles, and building high-availability backend services.

TECHNICAL SKILLS

- Languages: C# (.NET Core/Framework), Java, Python, JavaScript (ES6+), TypeScript, SQL, PHP.
- Backend: ASP.NET Core Web API, Minimal APIs, Entity Framework Core, LINQ, Java Spring Boot, Django, Laravel.
- Frontend: HTML5, CSS3, Bootstrap, Vanilla JavaScript.
- Databases: SQL Server (SSMS), PostgreSQL, MySQL, MariaDB.
- Architecture & Tools: Clean Architecture, MVC, RESTful API Design, JWT/Authentication, Git/GitHub, Unit Testing.

PROFESSIONAL EXPERIENCE

Meta VR – Backend Engineer (Contract) | *May 2025 – June 2025*

- Architected a high-concurrency backend for a VR-based flight simulation platform using .NET Minimal APIs, ensuring sub-100ms latency for real-time interactions.
- Optimized data retrieval processes, improving simulation responsiveness by 30% through efficient memory management and optimized SQL queries.
- Developed interactive frontend components using native JavaScript to interface with VR telemetry data.

Epoch School – Full Stack Developer | *Jan 2025 – Apr 2025*

- Engineered a comprehensive web application for educational management, utilizing ASP.NET Core and Clean Architecture to ensure maintainability and scalability.
- Implemented a robust security layer using JWT authentication and Role-Based Access Control (RBAC), securing sensitive student and faculty data.
- Integrated a seamless UI/UX using Vanilla JS and Bootstrap, resulting in a 25% increase in user engagement during the beta phase.

PROJECTS

Try&Buy (Virtual Try-On System) – Graduation Project | *Java Spring Boot, MySQL*

- **Designed** and implemented a secure, scalable e-commerce backend supporting virtual fitting features and complex cart operations.
- **Developed** RESTful APIs with Spring Security, managing authentication for multiple user roles (admin/customer).
- **Optimized** the MySQL database schema for high-volume product filtering, achieving an Excellent (A+) grade for technical execution and system architecture.

E-Commerce Backend Engine | *.NET Core, EF Core, SQL Server*

- **Developed** a full-featured RESTful API incorporating Entity Framework Core for complex data modeling and relational mapping.
- **Built** modular systems for inventory management, checkout workflows, and automated total calculations.
- **Applied** clean architecture principles to decouple business logic from infrastructure, facilitating easier unit testing and future scalability.

Newspaper Management System | *.NET MVC, SQL Server*

- **Created** a multi-tier content management system (CMS) allowing hierarchical department control and full CRUD functionality for articles.
- **Leveraged** MVC patterns to ensure a clean separation of concerns, improving codebase readability and reducing bug regression.

Employee Data Management System | *Python, CSV, DEPI*

- **Engineered** a high-integrity data management engine using Python to automate administrative workflows for employee records.
- **Implemented** robust data persistence logic utilizing CSV-based storage, ensuring reliable data retrieval and system state management.
- **Optimized** search functionality for *O(1)* record retrieval by unique identifiers and developed comprehensive **CRUD operations** with strict input validation.
- **Demonstrated** technical proficiency in file I/O operations and modular programming within a collaborative learning environment (DEPI).

DoctorsHub Healthcare Platform | *Django, Python, SQLite*

- **Architected** a full-stack medical directory platform using the Django MVT framework, ensuring a clean separation of concerns between backend logic and UI.
- **Integrated** a secure user authentication and authorization system to manage patient accounts and protect sensitive search data.
- **Developed** a dynamic, multi-parameter search engine using Django ORM to filter healthcare providers by geolocation and specialization.
- **Designed** a responsive backend architecture that facilitates real-time data filtering and seamless navigation for end-users.

EDUCATION

B.Sc. in Computer Science and Artificial Intelligence | *Helwan University, Cairo*

- GPA: 3.4/4.0 (Excellent Standing)
- Key Coursework: Data Structures, Algorithms, Database Systems, Software Engineering, System Design.

Languages & Soft Skills

Languages: Arabic (Native), English (B1).
Soft Skills: Communication, Self-motivated, Energetic, Responsible**.**

CERTIFICATIONS & TRAINING

- **Full-Stack Web Development (.NET Track)** – ITI (Information Technology Institute) | *Sep 2024*
- **Full-Stack Web Development (Python Track)** – ITI | *Aug 2024*
- **Mastering MySQL: Database Creation & Management** – Udemy | *Feb 2025*
- **Digital Egypt Pioneers Initiative (DEPI) –** Python Programming & Data Management | *Nov 2024*