

Marwan Mohamed

Backend .Net Developer

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Professional Summary

Computer Engineering student with a strong foundation in backend development and software development. Proficient in building scalable RESTful APIs using C#, ASP.NET Core, and Entity Framework Core. Experienced with full-stack projects and clean code principles, including SOLID, Repository Pattern, and JWT authentication. Demonstrated strong problem-solving skills through hands-on development and competitive programming. Currently seeking a backend development internship to contribute to impactful, real-world solutions in a collaborative team environment.

Technical Skills

Languages and Frameworks: C#, C++, C, Java, ASP.NET Core MVC, ASP.NET Core Web API

Software Development Concepts: Object-Oriented Programming (OOP), Data Structures, Algorithms, SOLID Principles, Design Patterns, Problem Solving

Web Development: HTML, CSS, Bootstrap, JavaScript

Database Management: Microsoft SQL Server, Language Integrated Query (LINQ), Entity Framework Core

Software Architecture and Design: Repository Pattern, Unit of Work Pattern, N-Tier Architecture

Version Control: Git and GitHub

Projects

JWT Authentication with .NET Identity

June 2025 | [GitHub Repo](#)

- Built secure JWT authentication with refresh tokens, Google OAuth, and role-based access.
- Added email workflows (password reset/account deletion) with token validation.
- Developed RESTful endpoints for auth, token management, and user controls.
- **Key technologies:** ASP.NET Core, JWT, Identity, EF Core, MailKit, OAuth.

Numerical Methods Calculator

May 2025 | [GitHub Repo](#)

- Built a WinForms application that automates roots, interpolation, integration, and ODEs.
- Coded a Shunting-Yard equations parser that supports e, ln, sin, cos, tan, etc., plus strict input validation.
- Led a 4-person GitHub workflow, hitting >90 % test coverage on the C++ math engine.
- **Key technologies:** C++17, WinForms (.NET Framework), Git/GitHub, Shunting Yard Algorithm.

Villas Reservations - RESTful API

March 2025 | [GitHub Repo](#)

- Built a secure RESTful API using ASP.NET Core and Entity Framework Core to manage villa listings.
- Integrated JWT-based authentication and input validation for secure, reliable access.
- Connected backend to a Frontend MVC app for complete end-to-end functionality and data flow.
- **Key Technology:** ASP.NET Core Web API, JWT Authentication, Auto Mapper, ASP.NET MVC.

E-Commerce Bookstore Platform

January 2025 | [GitHub Repo](#)

- Developed a modular e-commerce web app with user authentication using ASP.NET Core Identity and EF Core.
- Designed a scalable database with models for categories, products, and orders, applying Repository and Unit of Work patterns.
- Ensured maintainability and flexibility through N-Tier Architecture and Dependency Injection.
- **Key Technologies:** C#, ASP.NET Core MVC, Repository Pattern, Unit of Work, Authentication & Authorization.

Technical Experience

- Member of Dashboard EVER Team
Racing Team SCU *September 2023 – March 2025*
Ismailia, Egypt
 - Contributed to the end-to-end development of electric rally cars, focusing on real-time data systems.
 - Integrated and calibrated over **15 sensors** (e.g., temperature, RPM, speed) to provide real-time feedback to the driver
 - Reduced data latency by **30%** through optimization of sensor communication protocols.
- Java Programming Internship
Information Technology Institute (ITI) *July 2023 – August 2023*
Ismailia, Egypt
 - Developed a Java-based painting application with support for multiple brush types, colors, and undo/redo features.
 - Reinforced OOP concepts through hands-on project development.
 - Used Git and GitHub for version control, managing over **30 commits**.
- Member of International Collegiate Programming Contest (ICPC)
SCU Branch *August 2022 – November 2022*
Ismailia, Egypt
 - Solved over **140 problems** on Codeforces improving algorithmic thinking and speed.
 - Competed in **5** online ICPC training contests.
 - Focused on data structures, dynamic programming, and graph theory to prepare for contests.

Education

Suez Canal University, Faculty of Engineering

Bachelor's degree in computer and control engineering
Cumulative GPA: 3.31 / 4.0

October 2021 – July 2026
Ismailia, Egypt

Certificates

- SOLID Design Principles - in Arabic - Udemy
- RESTful Web API - The Complete Guide Part 1 - Udemy
- RESTful Web API - The Complete Guide Part 2 - Udemy
- .NET Core MVC - The Complete Guide - Udemy
- C# (Basic) - HackerRank
- SQL (Basic) - HackerRank
- SQL (Intermediate) - HackerRank
- Introduction to Java Programming - ITI

Soft Skills

- Team Work & Collaboration
- Communication
- Logical Thinking
- Problem Solving
- Time Management
- Continuous Learning

Languages

- **Arabic:** native
- **English:** intermediate