# Ahmed Abdulrahim

.NET Developer

# SUMMARY

A Computer Science student and .NET developer with expertise in building Web APIs and full-stack applications using C# and ASP.NET Core. Experienced in developing scalable solutions with clean architecture, including school management systems and learning platforms. Strong foundation in software engineering principles, data structures, and algorithms with competitive programming experience. Quick to adapt and team-oriented, eager to contribute to impactful software projects.

## EDUCATION

### Kafrelsheikh University

Sep. 2021 – Expected Jun. 2025

Bachelor of Computer Science | Faculty of Computers and Information

GPA: 3.2

- Relevant Coursework: Data Structures & Algorithms, Database Systems, Software Engineering, Operating Systems, Computer Networks, Web Development
- Academic Projects: Developing OllamaNet as graduation project, a microservices framework for integrating LLM capabilities into .NET applications
- Activities: Member of University Programming Club, Participated in ECPC 2022 & 2023

# **TRAINING**

**DEPI** Jun 2024 - Oct 2024

Digital Egypt Pioneers Initiative

Hybrid

- Web Development .NET Core Framework Track.
- · Courses: Database Design, MS SQL Server, C#, EF Core, MVC, RESTful API, Security, Multithreading, Business English.
- Developed **Learnflow**, an Online Learning Platform, as a final project.

ITI Jul - Aug & Sep 2024

Summer Training

Hybrid

- Web Development .NET Core Framework Track.
- Completed a 20-day intensive training in .NET Core, covering Database Fundamentals, C#, OOP, LINQ, Entity Framework, and MVC.
- Developed a university management system as a final project using **Code First** and **CRUD** operations.

## **PROJECTS**

#### OllamaNet - Microservices Framework | Graduation Project | ASP.NET Core Web API Microservices

2025

A microservices framework for integrating **Ollama**'s **LLM** capabilities into .NET applications with distributed architecture.

- Architected a microservices-based framework with high availability and scalability using ASP.NET Core.
- Enabled streaming capabilities for **LLM** responses through **RESTful** web APIs, enabling **real-time text generation** and response handling.
- Implemented configurable LLM parameters including temperature and model settings, allowing API users to fine-tune response characteristics.
- Engineered distributed caching and rate limiting using Redis, improving response times and ensuring system stability.
- Designed and deployed comprehensive security measures including JWT authentication, role-based access control, and request validation.
- · Constructed API Gateway using Ocelot for microservices orchestration, handling routing, load balancing, and request aggregation.

Technologies: .NET Core, Microservices, Redis, Ocelot, JWT, Git

An online learning platform for managing courses and quizzes while tracking student progress.

- Developed LearnFlow, a comprehensive online learning platform with role-based access control.
- Implemented a dynamic quiz system with support for multiple question types and automated scoring.
- Designed an admin dashboard for course management with analytics and progress tracking.
- Integrated a student progress tracking module with real-time grade updates.

Technologies: .NET Core, Entity Framework Core, SQL Server, JavaScript, MVC, Git

#### Blood Bank Management System | Backend Developer | C# - Windows Forms App

December 2023

- Led development of a Blood Bank Management System for hospital blood inventory management.
- Implemented secure role-based access with real-time inventory tracking.
- Designed a scalable database architecture with **automated stock alerts**.
- Reduced blood request processing time through automated matching algorithms.

Technologies: C#, Windows Forms, SQL Server, Database Design, OOP, Git

Holly View | Back-end Developer | ASP.NET Developer | C# - Web Application

May 2023

- Developed Holly View, an entertainment platform, with secure user authentication and authorization using **password hashing** to protect user data.
- Implemented a personalized watch-list feature to enhance user engagement.
- Designed a **review system** with sentiment analysis capabilities.
- Built an admin panel for movie management with content moderation features.

Technologies: ASP.NET, SQL Server, Authentication & Authorization, Git

## **WORK EXPERIENCE**

Mostaql Nov 2025 – Present

Freelance .NET Developer

- Remote
- Developed a School Management System Web API using .NET Core and layered architecture
- Designed and implemented a scalable database schema for managing student records, courses, and administrative tasks
- Implemented clean architecture with separate layers for controllers, services, and repositories
- Utilized Entity Framework Core for efficient data access and management
- Integrated authentication and authorization using JWT tokens for secure API access

#### **Techno Kids & Techno Future**

Sep 2025 - Dec 2025

Programming Instructor

On-site

- Instructed students in web development fundamentals including HTML and CSS
- Taught introductory programming concepts using **Scratch** programming language
- Developed and delivered engaging lesson plans for young learners
- Fostered a positive learning environment and mentored students in their programming journey

# TECHNICAL SKILLS

Programming Languages C# (Primary), C++, SQL, HTML/CSS, Python

Frameworks &

.NET Core, ASP.NET MVC, Entity Framework Core, RESTful APIs

Databases &

Libraries

MS SQL Server, Git/GitHub, Visual Studio, Swagger UI

Tools Tools

Software Design OOP, Design Patterns, SOLID Principles, Clean Architecture Problem Solving Data Structures, Algorithms, Competitive Programming

 ${\bf Soft\ Skills}\quad {\bf Leadership,\ Team\ Collaboration,\ Problem\ Solving,\ Communication}$ 

# **CERTIFICATIONS AND ACHIEVEMENTS**

#### Competitive Programming

- Ranked 32nd out of 200 teams (top 16%) in ECPC 2023 and 66th (top 33%) in ECPC 2022 Day 2 qualification contests
- Active competitive programmer on **Codeforces** with 200+ solved problems using **C++** (Current rating: 971)

### · Professional Development

- **DEPI** Digital Egypt Pioneers Initiative (*Jun-Oct 2024*): Completed comprehensive .**NET Core** development track, developed **LearnFlow** as final project
- ITI Summer Training (*Jul-Sep 2024*): Intensive 20-day .NET Core training with focus on database design and web development

#### · Additional Certifications

- InnovEgypt Entrepreneurship Training (*Sep 2022*): Completed 45-hour program and developed startup project proposal
- FWD Web Development Challenger: Advanced HTML/CSS certification & Udacity Intro To Programming fundamentals

# LANGUAGE SKILLS

- Arabic: Native Proficiency
- English: Professional Working Proficiency (Reading, Writing, Speaking)