

# Mohamed Ahmed Mostafa

+20 150 801 9645 | [mohamed.ahmmmed.dev@gmail.com](mailto:mohamed.ahmmmed.dev@gmail.com) | Obour, Egypt  
[linkedin.com/in/mohamed-ahmed-mostafa](https://linkedin.com/in/mohamed-ahmed-mostafa) | [github.com/meedoomostafa](https://github.com/meedoomostafa)

## EDUCATION

### Zagazig University

Bachelor of Science in Computer Science

Expected May 2026

Zagazig, Egypt

- Coursework: Data Structures & Algorithms, OS, Distributed Systems, Compiler Design, Software Engineering.

## TECHNICAL SKILLS

**Languages:** C#, Python, C++, TypeScript, SQL, Go, HTML/CSS

**Frameworks/Libraries:** ASP.NET Core, FastAPI, Entity Framework, PyTorch, WebGPU

**Tools/Databases:** Git, Docker, CI/CD, Azure, Linux, SQL Server, PostgreSQL, Redis

**Core Concepts:** System Design, OOP, Design Patterns, Bit Manipulation

## LEADERSHIP

### Technical Instructor & Mentor

2023 – Present

ICPC Zagazig Community

Egypt

- Leading sessions on **Advanced DSA** for 100+ students; focusing on Dynamic Programming and Graph Theory.

## TECHNICAL PROJECTS

### WDLC (Web Deep Learning Compiler) | Python, TypeScript, WebGPU

2025 – Present

- Developing a high-performance runtime to execute **PyTorch models** in-browser via client-side GPUs[cite: 15, 19].
- Engineered a compiler to parse computational graphs and optimize tensor operations for **WebGPU runtime**.

### BlitzMate Chess Engine | Python, FastAPI, Bit Manipulation

2025 – Present

- Built a Classical engine using **Alpha-Beta Pruning**, **Negamax**, and **Zobrist Hashing**.
- Optimized move generation using bitboards, achieving high-speed node evaluation for competitive gameplay.

### Bosla - AI Learning Platform | .NET 9, React, Onion Architecture

2025 – Present

- Designed a multilingual platform using **Onion Architecture** to generate dynamic learning roadmaps via Pipeline Application.

### Skyra - Weather Prediction | Python, FastAPI, LLM, NASA API

2025

- Developing a FastAPI backend for fetching metadata from **NASA APIs** for real-time environmental data processing.

### Villa Management System | ASP.NET Core, SQL Server, AutoMapper

2025

- Engineered a high-concurrency **RESTful API** utilizing **Asynchronous Programming** to maximize server throughput and reduce thread starvation.
- Implemented a decoupled architecture with **DTOs** and the **Repository Pattern** to ensure clean separation of concerns and data integrity.

### Enterprise E-Commerce API | ASP.NET MVC, Identity, SQL Server

2025

- Architected a scalable backend adhering to **SOLID principles** with **Identity-driven RBAC** for secure, enterprise-grade access control.
- Designed robust **order-processing logic** utilizing the **Unit of Work** pattern to maintain atomic transactional integrity across complex workflows.

## ACHIEVEMENTS & COMMUNITY

**Competitive Programming:** Solved 350+ problems on Codeforces/LeetCode (**Handle: Medo00**); Active ICPC member.

**Technical Content:** Creator of "**DarkCipher00**" (YouTube), teaching DSA and Algorithms to the Arabic community.

**Chess:** Ranked in the **top 5% (1700+ Rating)** on Chess.com; applying strategic game theory to software design.