

SHERIF ELMOHAMADY MESBAH

PERSONAL INFORMATION	Tanta, Egypt sherifmesbah4@gmail.com +201122768124 Github : https://github.com/sherif-mesbahh Linkedin : https://www.linkedin.com/in/sherifmesbah/	
SUMMARY	Computer Science student with a strong foundation in software engineering, including data structures, algorithms, operating systems, networking, and databases. Practical experience includes backend development using ASP.NET Core, along with a deep passion for competitive programming	
EDUCATION	Tanta University Bachelor of Computer Science GPA : 3.5/4.0	<i>December 2022 - August 2026</i>
EXPERIENCE	Competitive Programming Instructor at ICPC Tanta <ul style="list-style-type: none">Volunteering to help other students improve their problem solving skills and learn different algorithms and data structures used in competitive programming by giving online sessions and creating contests	<i>March 2023 - Present</i>
PROJECTS	Smart Label <ul style="list-style-type: none">Created (in a team of 7) to develop digital price tags that update instantly via a central systemWorked on the backend API using ASP.NET Core. Applied Clean Architecture to enforce strict separation of concerns (domain, application, infrastructure, presentation layers)Optimized database performance by implementing the CQRS pattern using the Entity Framework Core for writes (maintainability) and Dapper for reads (high-speed queries)Implemented SOLID principles alongside design patterns like Repository (data access abstraction), Unit of Work (transaction management), and Dependency Injection (loose coupling) to architect a maintainable, testable, and scalable solutionOptimized stored procedures for efficient server-side pagination, boosting performance and reducing data loadSecured the API with JWT-based authentication, ensuring role-based access control HTTP Server <ul style="list-style-type: none">Developed a concurrent HTTP server in C#, handling multiple client connections efficiently using async I/OServing GET requests with proper status code responses (e.g., 200 OK, 404 Not Found, 500 Internal Server Error)Applied SOLID principles, using the Single Responsibility Pattern to separate HTTP Listener, request Handling, routing, and response generation for clean, maintainable codeApplied the Factory Pattern to dynamically instantiate request handlers, improving code scalability and modularity	
ACHIEVEMENTS	<ul style="list-style-type: none">Solved 2200+ algorithmic problems in C++ on various competitive programming platformsRanked 24th out of 233+ teams in ECPC (Egyptian Collegiate Programming Contest) qualifications <i>August 2023</i>Qualified for ECPC Finals after ranking 50th out of 250+ teams in qualifications <i>July 2024</i>Top 100 out of 450+ teams in ACM National Contest ECPC <i>August 2024</i>Ranked 7th out of 40+ teams in the Game of Coders contest at Mansoura <i>July 2024</i>	
SKILLS	Programming Languages : C#, C/C++, Python, SQL Technologies : ASP.NET Core, RESTful API, ORM(Entity Framework Core, Dapper), SignalR, Git, GitHub, ADO.NET SQL Databases : MySQL, SQL Server, Database Internals Architectural Patterns : Clean Architecture, Vertical Slice Architecture, Object-Oriented Programming (OOP), SOLID Principles, and Design Patterns. Soft Skills : Problem Solving, Competitive Programming, Team Work, Fast Typing	