**Mahmoud Ragab Omara**

**Email**: mahmoudragab0220@gmail.com | **Phone**: +20 127 8224 761 | **LinkedIn**: linkedin.com/in/mahmoud-ragab-63005823a | **GitHub**: github.com/MRagab2 | **Location**: Cairo, Egypt

**Professional Summary**

****Software Engineer | Backend Development****

**Software Engineer specializing in backend development with hands-on experience developing scalable RESTful API s, optimizing databases (MySQL, MongoDB), and implementing secure authentication systems (JWT) using Node.js and Express.js. Strong foundation in Computer Science & AI, with proven ability to collaborate in teams, adapt quickly, and solve complex problems under pressure. Experienced in agile development environments and committed to delivering maintainable, production-ready code. Focused on delivering clean, maintainable code and continuously expanding technical expertise to drive reliable backend solutions.**

**Education**

BSc in Computer Science and Artificial Intelligence.

Helwan University | Graduated in 2024 | GPA: 3.3 / 4.0

* Graduation Project: Attendance System Using Face Recognition.

**Technical Skills**

**Backend: Node.js, Express.js, PHP, REST APIs, JWT.**

**Databases: MySQL, MongoDB, SQL, PostgreSQL.**

**Frontend: React, JavaScript (ES6+), Bootstrap, HTML, CSS.**

**Tools: Git/GitHub, Postman, XAMPP.**

**Programming Languages: Python, C, Java.**

**Professional Experience:**

**Freelance Backend Developer | Remote.**

**Booking Appointment System |** *May 2023 - Jul 2023*

* Developed a booking system used by 50+ professors and 500+ students, reducing scheduling conflicts by 30%.
* Designed secure RESTful APIs with Node.js/Express.js, improving response times by 25%.
* Managed 5,000+ student records in MongoDB, ensuring high data availability.
* Implemented JWT authentication, reducing unauthorized access attempts by 40%.
* Collaborated with a team of 3 developers on GitHub, resolving issues 20% faster.

**Tech Stack:** Node.js, Express.js, MongoDB, Git, JWT, REST APIs.

**Learning Management System (LMS) |** *Jul 2022 - Oct 2022*

* Engineered a PHP back-end serving 200+ students, ensuring stable data workflows.
* Optimized MySQL queries, reducing data retrieval time by 40% and speeding up report generation.
* Customized Bootstrap UI and added JavaScript features, boosting user engagement by 15%.
* Independently maintained and deployed the system, delivering 95% bug-free performance.

**Tech Stack:** PHP, MySQL, JavaScript, Bootstrap, XAMPP.

**Academic Projects**:

**Attendance System Using Face Recognition** (Graduation Project) | *Oct 2023 - Jun 2024*

* Engineered RESTful APIs with **Node.js/Express.js** to manage **10,000+ attendance records**.
* Implemented **JWT authentication/authorization**, improving data security for **100+ users**.
* Optimized MySQL schema, reducing query execution time by **35%**.
* Coordinated with front-end developers to achieve zero integration issues.

**Tech Stack:** Node.js, Express.js, MySQL, JWT, RESTful APIs.

**Off-road Assistance Platform (Sal7ly) |** *May 2022 - Jun 2022*

* Delivered platform prototype for local drivers, deployed within 1-month deadline.
* Created a responsive front-end with (HTML, CSS, and JavaScript), improving usability score by 20% in testing.
* Designed PHP back-end to process real-time service requests, supporting 100+ concurrent users.
* Indexed MySQL database, reducing query delays by 25%.

**Tech Stack**: PHP, MySQL, HTML, CSS, JavaScript, XAMPP.

**Certificates**:

**Backend Development:**

* The Complete Node.js Course - RESTful APIs with Node.js, Express & MongoDB - (ITI Mahara-Tech) *(2024).*
* Introduction to MongoDB - (ITI Mahara-Tech) *(2023).*
* Building Web Applications with PHP & MySQL - (ITI Mahara-Tech) *(2023).*

**Programming Foundations:**

* Python Programming Basics - (ITI Mahara-Tech) *(2023).*
* JavaScript - (ITI Mahara-Tech) *(2023).*
* Modern JavaScript (ES6+) - (ITI Mahara-Tech) *(2023).*

**Best Practices:**

* Clean Code & Maintainable Structures - (ITI Mahara-Tech) *(2023).*

**Languages**

* Arabic - Native.
* English - Very good.