

# Mahmoud Ragab Omara

Location: Cairo, Egypt

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## Professional Summary

**Software Engineer** with hands-on experience in building RESTful APIs, managing databases with MySQL and MongoDB, and implementing secure authentication systems using Node.js and Express.js. Passionate about writing clean, scalable code and collaborating in agile teams to deliver efficient back-end solutions. Strong foundation in computer science with a BSc in CS & AI.

## Education

BSc in Computer Science and Artificial Intelligence, Helwan University (2024).

## Technical Skills

**Languages:** JavaScript (ES6+), PHP, Python.

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

**Runtime Environment:** Node.js

**Frameworks/Libraries:** Express.js, React, Bootstrap.

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

**General Knowledge:** HTML, CSS, C, Java.

## Projects:

### Attendance System Using Face Recognition (OCT 2023 - JUN 2024)

- Developed the back-end for an attendance system designed to track and manage attendance for educational or corporate environments.
- Implemented RESTful API endpoints using Node.js and Express.js to handle data operations.
- Utilized MySQL for efficient database management and ensured secure and scalable data storage.
- Integrated user authentication and authorization to protect sensitive information and manage access rights.
- Collaborated with front-end developers to ensure seamless integration and functionality across the entire application.

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

### Booking Appointment System (MAY 2023 - JUL 2023) [\[GitHub: https://github.com/MRagab2/Booking-System\]](https://github.com/MRagab2/Booking-System)

- Developed a comprehensive booking system facilitating appointments between professors and students.
- Designed and implemented back-end functionality using Node.js and Express.js, ensuring efficient data flow and secure API endpoints.
- Managed MongoDB for database operations, enhancing data management efficiency.
- Implemented user authentication and authorization mechanisms to ensure data security and privacy.
- Collaborated with team members using Git/GitHub to troubleshoot issues, optimize performance, and implement new features.

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

### Learning Management System (L.M.S.) (JUL 2022 - OCT 2022)

- Customized a Bootstrap template (Sb-admin 2.0) and enhanced user experience with JavaScript modifications.
- Developed a full PHP back-end for efficient data transfer and logical workflow.
- Managed MySQL database on XAMPP, reducing data retrieval time.
- Independently improved the project until deployment, resulting in nearly bug-free software.

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

### Off-road Assistance Platform (Sal7ly) (MAY 2022 - JUN 2022)

- Developed custom front-end using HTML, CSS, and JavaScript, improving user engagement.
- Designed and implemented a PHP back-end for accurate and efficient data transfer.

- Managed MySQL database on XAMPP, reducing data retrieval time.
- Completed the project within a tight deadline, achieving high stakeholder satisfaction.

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

## Certificates:

### Programming Foundations

- [Python Programming Basics from ITI platform \(Mahara-Tech\)](#).
  - Learned variables, loops, functions, and data structures using Python.
- [JavaScript from ITI platform \(Mahara-Tech\)](#).
  - Built interactive front-end features and dynamic content using core JavaScript.
- [Modern JavaScript: ES6 and beyond from ITI platform \(Mahara-Tech\)](#).
  - Mastered modern syntax: arrow functions, destructuring, modules, promises, and async/await.

### Web Development

- [Building Web Applications using PHP & MYSQL from ITI platform \(Mahara-Tech\)](#).
  - Developed CRUD applications, connected to MySQL databases, and implemented server-side logic.
- [The Complete Node.js Course \(RESTful Web Services with Node.js, Express, and MongoDB\)](#).
  - Built RESTful APIs, managed NoSQL data with MongoDB, and handled authentication with JWT.
- [Introduction into MongoDB from ITI platform \(Mahara-Tech\)](#).
  - Gained understanding of document-based data modeling and MongoDB CRUD operations.

### Clean Code & Best Practices

- [The principles of writing clean code from ITI platform \(Mahara-Tech\)](#).
  - Learned code readability, refactoring techniques, and maintainable code structures.

## Languages

- Arabic (Native).
- English (Very good).

## Social Skills

- Team collaboration.
- Time management.
- Adaptability.
- Self-learning / Continuous learning.
- Working under pressure.
- Problem-solving.
- Communication.
- Attention to detail.