Omar Hamdy

📞 +20 1008039990
🏳 Alexandria, Egypt
👤 Permanently Exempted

in Omar Hamdy
✉ o.hamdy1999@gmail.com
⊙ OmarHamdyx
ℍ HackerRank

Experience

❖ RMZ Tech 9/2021 - 10/2021
(Business Development & Software Engineering company since 2007)
- Completed a 1-month intensive training program in web development using Laravel framework, gaining proficiency in PHP and web development best practices.
- Collaborated with a team to develop a custom web application, including a pothole reporting website. Users can report potholes by map location, and administrators (government employees) have system privileges to address them accordingly.
- Demonstrated strong problem-solving skills and attention to detail in debugging and testing code, ensuring the smooth functionality of the pothole reporting website.

❖ Engovation 8/2022 - 10/2022 (Engineer training company)
- Successfully completed a 2-month training program in Cisco Certified Network Associate (CCNA), gaining expertise in network engineering and troubleshooting.
- Developed practical skills in configuring routers and switches, implementing VLANs, and managing network security.
- Demonstrated effective communication and teamwork skills in collaborating with other students on group projects and assignments.

Education

Faculty of Engineering Alexandria University
Sep 2018-June 2023
B.Sc. in Computer Science and Communication
GPA: 3.04/4 (Very Good)

Alexandria Language School
High school diploma (2004-2018)
Graduated with 95.7%.

Skills

Programming : OOP, C#, C++, C, HTML, MySQL, JavaScript, CSS, Json, Java, Python

Libraries/Framework : .NET Core, EF Core, Pomelo , Swagger, ReactJS, Django, NodeJS, Express

Tool/Platform : Visual Studio Community, VS Code, Postman, Microsoft Office, GIT, MATLAB

Projects

❖ Driver Drowsiness Detection | Python, Linux (Grad Project)
- Developed an embedded system driver drowsiness detection using Nvidia Jetson Nano, camera, keypad, and buzzer.
- Utilized OpenCV and the Dlib library to detect faces and facial landmarks and calculate the eye aspect ratio.
- Developed a real-time system that compares the eye aspect ratio with a given threshold and signals the buzzer if the threshold is exceeded.
- Implemented a keypad input system to modify the threshold value.

❖ Pothole-Reporting-System | Laravel Framework
- A web application for reporting potholes to the government.
- Enabled users to report potholes with map location details.
- Implemented an admin panel for government employees to manage and prioritize pothole reports.

❖ E-Commerce API | .NET Core, EF Core, Pomelo
- Developed a feature-rich .NET API for an e-commerce platform, leveraging .NET Core, EF Core, and Pomelo EF Core.
- Integrated a sophisticated search feature, enabling users to search for products based on name or category.
- Repository Pattern for efficient data access.
- Service Layer Pattern for modular business logic.
- Strategy Pattern for flexible services behaviour.

❖ Express Book API | Express NodeJS
- Implements GET, POST, PUT, and DELETE functions for book management.
- Utilizes endpoint filters for precise data retrieval.
- Enhances performance with async/await for asynchronous

❖ Budget App | React.js
- React-based budget app for efficient tracking and management of expenses.
- Intuitive user interface for seamless budget input and visualization.
- Dynamic and responsive updates to reflect changes in budget allocation.

❖ To-Do List App | ReactJS
- React-powered to-do list for organizing and managing daily tasks.
- User-friendly with drag-and-drop functionality for task prioritization.
- Synchronized across devices for on-the-go task management.

❖ Car Rental System Website | HTML, PHP, and MySQL
- Developed a car rental system website using HTML, PHP, and MySQL.
- Allowed customers to search for rental cars, make reservations, and manage bookings.
- Included admin panel for managing car inventory and customer reservations.

❖ Fitness Tracker App | Java
- Feature-rich fitness tracker app using Java.
- Allowed users to track daily exercise routines, set fitness goals, and monitor progress.

❖ Client-Server Interaction | Python
- Client-server interaction system using Python.
- Allowed multiple clients to connect to a server and exchange messages in real-time.

❖ Restaurant Reservation System | Java
- Restaurant reservation system using Java and applying Object-Oriented Programming concepts.
- Allowed customers to make reservations, browse menus, and provide feedback.
- Included admin panel for managing reservations and restaurant operations.

❖ Chess Game | Python
- Fully functional chess game using Python and applying Test-Driven Development principles.
- Included all standard chess rules and features.

❖ Linux Shell | C Programming
- Command-Line Interface for user interaction.
- Shell Commands include file manipulation and process control.
- Supports scripting, system integration, and cross-platform compatibility.

❖ Embedded DTMF Code Lock | Embedded C
- Designed and implemented an embedded DTMF code lock system using an AVR ATmega16A Microcontroller.
- Used DTMF tones generated by a keypad and a DTMF decoder to authenticate and unlock a door.

Courses

Software Engineering, Analysis and Design of Algorithms, Data Structures I & II, Operating System, Database Systems, Computer and Network Security, Artificial Intelligence, Computer Network, Net-Centric Computing, Cloud Computing , Developing React Apps, Developing Express Node.js Apps.

Languages

- ❖ **English:** Full Professional Proficiency
- ❖ **French:** Limited working proficiency