

Omar Mamon Hamed

Computer Engineering Student

+2001125430927 omar.mamon203@gmail.com GitHub LinkedIn

Profile

4th-year Computer Science and Engineering (CSE) student with a growth mindset and a passion for continuous learning. Skilled in teamwork, fostering effective communication, and promoting knowledge sharing among peers. Eager to apply AI and emerging technologies in real-world applications while seeking opportunities for professional growth and development.

Professional Experience

Cellula - Machine Learning Intern

Feb 2025 – Mar 2025

Performed EDA and preprocessing on large datasets to extract insights and predict trends. Created visualizations and applied ML models using Python, Pandas, Seaborn, and Scikit-learn. Developed and deployed ML models integrated into Django and Flask web apps.

Mec Academy - Backend Web Development Diploma

Jun 2024 – Dec 2024

Learned PHP fundamentals, OOP, and MySQL database design. Built applications with Laravel, including authentication, routing, CRUD, and admin panels. Applied design patterns, MVC architecture, and API integration.

Education

Faculty Of Engineering - Ain Shams University

Sep 2021 – present

Bachelor of Science in Computer and Systems Engineering

Skills

Programming Languages – C++ | Java | Python | Embedded C | MIPS Assembly | ARM Assembly

Web development – HTML5 | CSS3 | JavaScript | Bootstrap5 | PHP | Laravel

Databases – MySQL | PostgreSQL | MongoDB

Data Analysis – Python | Pandas | Matplotlib | Seaborn | Excel

Machine Learning – Scikit-learn | Keras

Operating Systems – Windows | Linux

Version Control – Git | GitHub

Projects

Cartnest – Full Trading E-Commerce System

FastAPI | PostgreSQL | Docker

Developed a backend with FastAPI and SQLAlchemy, creating APIs for users, products, deposits, and transactions. Used PostgreSQL with a distributed setup, replicas, and fragmentation for better scalability. Containerized with Docker for easy deployment and development.

Slaughterhouse Operations Portal

Using Flask | QR Code Integration

Built a Flask portal for tracking slaughterhouse operations using QR codes for product shipments, timestamps, weights, and other data.

Mobile Shop Portal

Using Laravel | MySQL

Built a mobile shop portal for selling accessories with admin and user interfaces, utilizing Laravel, MySQL, and Faker for data generation.

FareSpot

Using Django | Machine Learning (Python, Pandas, Scikit-learn)

Developed a machine learning model using Django for deployment. Tackled large, real-world datasets and applied advanced preprocessing and feature engineering techniques.

Hotel Reservation Prediction System

Using Flask | Machine Learning (Python, Pandas, Scikit-learn)

End-to-end machine learning pipeline from data analysis to deployment using Flask. Emphasized data preprocessing, model building, and insight presentation.

Coffee Shop App

Using PHP | MySQL

Created a coffee shop app with admin and user interfaces, using MySQL for data handling and order management.

E-Commerce Fashion Shop

Using PHP | JSON

Developed an e-commerce website for a fashion shop, handling both admin and user interfaces for product and order management.


GPS Tracking System

Using Embedded C | ARM | "Tiva C" microcontroller

"Tiva C" microcontroller connected with Bluetooth module

Python script to display the tracking system on a map showing the actual path taken by the module

Certificates

- Backend Development 
- Java Programming: Problem Solving 
- Cellula MI Intern 
- Java Programming: Data Structures 

Languages

Arabic – Native/Bilingual

English – Conversational