Muhammad Mazhar
Data Scientist | Machine Learning | AI Engineer

With a solid foundation built over many years in Electronics Engineering, I am now an aspiring Data Scientist, Machine Learning, and AI Engineer. My expertise spans deep analytical capabilities, computer science modeling, and proficiency in Python, TensorFlow, PyTorch, and other data-driven tools. I've successfully applied these skills in impactful projects. Holding both an MBA and a Bachelor's in Electronics Engineering, I am eager to leverage data to drive business insights and innovation in my new career path.

WORK EXPERIENCE

ML Engineer – Internship | Omdena Inc. | May 2024 – Present

Omdena-Innovation Challenges
Soil Nutrient Prediction for Enhanced Fertilizer Recommendations
EDA, Modeling for SOC, Boron, Zn, API Development in FastAPI, Streamlit App for PoC.

3D Roof Reconstruction with CV for Solar Energy Optimization
Contributed to 3D reconstruction model development, which includes PointNet Segmentation Model Implementation to identify roof tops.

Omdena-Local Chapter Challenges
Identifying Potential Areas for Urban Agriculture in Milan, Italy
Contributed mainly in task 1 of the Omdena challenge, which includes data collection from Google Earth Engine, EDA and visualization, unsupervised modeling and web app development.

Electronics Engineer (R&D) | MK Electronics | 2003 - Present

Key Responsibilities

◈ Design and Development of industrial control & automated systems by using micro-controllers, PLCs.
◈ Designing also includes PCB Layouts (using PC based CAD systems).
◈ Programming microcontrollers.
◈ Product testing and manufacturing.
◈ Estimation, preparation of technical documents.
◈ Service and Repair control systems.

Key Accomplishments

◈ Successfully designed, developed, Installed and Commissioned 'Load Shedding Module for a renowned client.
◈ Successfully designed and developed 'Programmable 4-20mA Indicator and Controller for a client.
◈ Other projects including 'Tower Light Monitoring Unit', 'Sequence Controllers'.

EDUCATION

MBA in Business Administration – May 2008
The University of Northampton, England

Bachelor of Engineering (Electronics) – Jan 2002
NED University of Engineering and Technology, Karachi, Pakistan

Udemy
Several Udemy courses on Python, Data Science, ML/DL, Power BI, Computer Vision, FastAPI, Databases etc.

CONTACT

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- github.com/mm-mazhar/mazhar
- mmazhar.onrender.com (Portfolio)

SKILLS

Languages
Python,
JavaScript– Novice

Frameworks
TensorFlow, PyTorch, Scikit-Learn, OpenCV

Data Visualization
PowerBI, Plotly

Databases
MySQL, PostgreSQL, Redis, Firebase

Scraping
Selenium, Beautiful Soup

Web Frameworks
FastAPI, Flask

Markup Language
HTML

Design Language
CSS

Projects

- **End-to-End Regression Model Pipeline**
  From Data Scraping to Deployment: Using PyPI Model Packaging, Fast API, Docker with CI/CD Integration

- **ANPR with EasyOCR**
  Automatically Number Plate Recognition (ANPR) from given images, webcam, and videos by using transfer learning from Pre-Trained Model SSD MobileNet v2 from TF Model Zoo.

For More Please Visit:

https://mmazhar.onrender.com