

MAI KASSEM

Machine learning Engineer & Data Scientist

E-mail: mai_mohsen02@hotmail.com

Website: <https://maik122.github.io/#CV>

Phone: +447709865298

Bristol, United Kingdom

Summary

Computer Science graduate turning data into actionable solutions. Experienced in building and deploying ML models with TensorFlow, Keras, Scikit-learn, Flask, and Streamlit. Skilled in Python, C++, SQL, and feature engineering, with a focus on accurate, optimized AI systems.

Education

University Of The West of England 2024

Bachelor of Science in Computer Science | Artificial Intelligence Pathway

Skills

Programming Languages: C++, Python, SQL

Machine Learning: Scikit-learn, TensorFlow, Supervised & Unsupervised Learning, Neural Networks, OpenCV, Natural language processing (NLP), Ensemble Methods, Model Evaluation techniques, Hyperparameter Tuning, Feature Engineering

Data Analysis & Visualisation: Pandas, NumPy, Seaborn, Matplotlib, Exploratory Data Analysis, Data cleaning & Wrangling

Tools: Git, Docker, Jupyter Notebooks, FastAPI, Flask, Streamlit

Soft Skills: Problem-Solving, Time Management & Adaptability, Self-Learning & Continuous Improvement

Project Highlights

Premier League Match Outcome Predictor

Predicted match outcomes using historical data with DNN, SVM, and Random Forest models.

Achieved high accuracy through preprocessing, feature engineering, and model comparison.

Tech Stack: Python, Pandas, NumPy, Scikit-learn, Tensor-Flow, Keras

Engine Anomaly Detection & RUL Prediction

Built GRU-based model predicting engine remaining useful life from sensor data (MAE: 17.84, R²: 0.83). Deployed via Flask for real-time input and predictions.

Tech Stack: Python, TensorFlow, Keras, NumPy, Scikit-learn, Flask

Traffic Violation Detection (In Progress)

Developing YOLOv8 system to detect wrong-way driving integrating Flask/FastAPI.

Tech Stack: Python, OpenCV, YOLOv8, Flask, FastAPI

Certifications

Generative AI Fundamentals

Databricks

Oct 2024

Deep Learning Specialization

DeepLearning.AI, Coursera

In Progress

Experience

* Data Scientist- BCG X (Indirect contract)

November 2025 - Present

- Participating in a structured virtual programme simulating business and data challenges.
- Working through guided ML and analysis tasks inspired by consulting scenarios.
- Applying predictive modelling and reviewing solutions to strengthen reasoning and workflow skills.
- Building practical confidence in data-driven problem solving.

* Data Science, Data analysis

* Data Scientist - EduLumos (Project-based internship)

October 2025 - November 2025

- Performed EDA, visualisation, and data cleaning.
- Built and evaluated ML and NLP models for prediction and sentiment analysis.
- Managed small end-to-end workflows on real datasets.

* Machine Learning, Data Science, Data Analysis

* Machine Learning Engineer- Elevvo (Project-based internship)

August 2025 - September 2025

- Developed ML models for regression, classification, and forecasting.
- Improved accuracy through feature engineering and tuning.
- Supported full ML lifecycle from EDA to model reporting.

* Machine Learning, Data Science, Deep Learning

* Airport Hostess - Bristol Airport

June 2022 - November 2022

- Delivered customer support in a fast-paced environment.
- Resolved passenger queries and maintained operational accuracy.

* Data Management, Customer Service

Languages

English

Arabic

French
