

Dynamic Data Science Engineer with strong software engineering skills and degrees in IoT and general engineering. Proficient in deep learning (DL) and machine learning (ML), I possess hands-on experience in developing and deploying predictive models in an agile environment. My technical expertise includes Python, and key frameworks such as TensorFlow and PyTorch, allowing me to effectively contribute to MLOps initiatives.

SKILLS

Tools and Languages	Python, Git, SQL, Spark, MLFlow, FastAPI, Flask, Docker, Kubernetes, MongoDB, Power BI, Tableau.
ML and DL	MLP, CNN, RNN, Transfer Learning, Computer Vision, AutoML, Data Augmentation, LLM, RAG, LoRA.
NLP	Text processing, Sentiment Analysis, Word Embedding eg. word2vec, Topic Modeling, NER.
Deployment Cloud	AWS (S3, EC2, Lambda, VPC, ACL, IAM, Lex, Bedrock, SageMaker), Databricks, Azure Databricks.
Communication	Fluent in Arabic, French and English.

PROJECTS

Personal Project:

CandidAI: AI-powered app that analyzes job applications and offers personalized summaries for recruiters.

Machine Learning and Deep Learning:

ML: Customer Churn Prediction for PowerCo - Streamlit app, Recipe Prediction for High Traffic, Real Estate Market Analysis.

DL: Object Recognition-YOLOv8, Face Generation-GAN, Transfer Learning-VGG16, Weather Forecast-LSTM, Anomaly Detection-VAE.

Natural Language Processing :

Financial Document Chatbot, Question-Answering chatbot, Spam Classifier, Movie Recommender System, Plagiarism detection.

Stack:

Pandas, NumPy, SciPy, Scikit-Learn, TensorFlow, Keras, Pydantic, XGB, OpenCV, Plotly, Streamlit, NLTK, SpaCy, Transformers.

EXPERIENCE

Business Analyst / Grand Paris Express
Egis Group
October 2022 — Present
Paris, France

- Contributed to the design and testing of an automatic incident detection system based on Computer Vision using YOLO v8, enhancing the ability to monitor and respond to incidents in stations and facilities with increased accuracy.
- Assisted in implementing the Elastic stack (Elasticsearch, Logstash, Kibana) for REST APIs, significantly improving network log monitoring efficiency and enabling faster issue resolution.
- Developed a custom data extraction and transformation tool, reducing processing time by 50% and enhancing workflow automation. Tools: Python, Flask, AWS Lambda, and S3.
- Created dashboards with Power BI, Power Query, and DAX, facilitating visualization and decision-making. Published using Power BI deployment pipelines and connected to Azure Databricks.

Data Management Engineer Intern / M2M3 Lausanne
Egis Group
March 2022 — September 2022
Lyon, France

- Developed a requirements traceability tool using NLP techniques (lemmatization, TF-IDF, and cosine similarity), improving the tracking and analysis of requirements for a metro project with 10,000 specifications.
- Automated processes with VBA and Regex, increasing operational efficiency.
- Created KPIs and interactive dashboards with Power BI, facilitating data analysis for better decision-making.
- Implemented a requirements management methodology and trained teams on the tool, ensuring effective project management and optimal stakeholder alignment.

Robotics Engineer Intern / MORFOSE
MS Innov
April 2021 — September 2021
Belfort, France

- Modeled and simulated the robot's modules in 3D using MATLAB, providing visual insights and validating design concepts.
- Programmed and simulated the robot in real-time with ROS and Gazebo, ensuring precise and reliable performance.
- Conducted performance tests on Linux, optimizing efficiency and ensuring the robot's compliance with standards.

EDUCATION

Certified Training in NLP, Deep Learning, and MLOps, Artefact School of Data
June 2024 — September 2024
Engineering Degree in IoT, SUPMICROTECH-ENSM, Besançon, France - Double Degree
2020 — 2022
General Engineering Degree, École des Mines de Rabat, Morocco
2018 — 2022
Certifications : Deep Learning Specialization and Machine Learning Specialization from DeepLearning.ai-Stanford. Spark SQL for Data Analysts from Databricks. AWS Certified Solutions Architect (November 30, 2024).