

Education

ENETCOM: National School of Electronics and Telecommunications of Sfax, Sfax September 2023 - Present
Engineering Degree in Data Engineering And Decision Support System Sfax, Tunisia

IPEIS: Preparatory Institute for Engineering Studies of Sfax 2021 - 2023
National Exam of Entrance to Engineering Schools, Technology - Physics Sfax, Tunisia

Experience

Pixemantic,Tunis June 2025 - August 2025
IA Intern Tunis, Tunisia

- Damage detection: Upload a car image and use YOLOv8 to detect and label damaged areas..
- Document analysis: Process uploaded documents using OCR and NLP for text extraction and correction.
- Client response: Combine image, document, and form results to generate clear answers using a RAG-based LLM.
- Tools: YOLOv8, OCR, OpenAI, Pinecone.

REGIM LAB,Sfax July 2023 - August 2023
Mobile Development Intern Sfax, Tunisia

- Developed a web and mobile application for managing the Nephro Doppler sector, enabling super administrators, administrators, and doctors to efficiently centralize and manage medical records.
- Designed and implemented features to facilitate patient data tracking, record organization, and streamlined access to medical information across user roles.
- Tools: Flutter , Firebase ,Google Cloud.

Projects

Autonomous Traders – Multi-Agent Equity Trading Simulation

- Developed a multi-agent equity trading simulator in Python with autonomous investors inspired by real-world trading strategies, using MCP servers for communication, memory, and tracing to visualize market interactions.
- Tools: Python, FastAPI, AsyncIO, OpenAI Agents SDK, MCP Servers, SQLite, Tracing Push Notification APIs.

AI-Driven Consumer Insights for Retail Optimization

- Built an AI model using TensorFlow and OpenCV for age and gender detection from retail images, and designed an interactive Streamlit dashboard providing real-time demographic insights and visual analytics.
- Tools: Transfer Learning, TensorFlow, OpenCV, Streamlit.

Credit Card Fraud Detection

- Implemented machine learning models with Scikit-learn and XGBoost to identify fraudulent transactions using SMOTE for data balancing, and deployed the system via Docker on Azure with a real-time monitoring dashboard.
- Tools: Python, Scikit-learn, XGBoost , Azure, Docker.

Football Match Prediction Model (MLOps Pipeline)

- Developed an end-to-end MLOps pipeline using XGBoost regression to predict key football match statistics such as total goals, cards, and corners. Integrated automated data processing, model training, and FastAPI deployment for real-time match predictions. .
- Tools :Python, XGBoost, FastAPI, Docker, DVC, GitHub Actions, Pandas, Scikit-learn

Technical Skills

Programming Languages: Python, R, Java, Scala, JavaScript

DevOps & MLOps: Docker, GitHub, CI/CD, Kubernetes, MLflow, DVC

ETL/ELT & Visualization: SQL, Power BI, Talend, Kibana

Databases:: MySQL, PostgreSQL, MongoDB

Machine Learning & Deep Learning: TensorFlow, PyTorch, Scikit learn, YOLOv8, LLM VLM, OCR,CNN

Certifications: Microsoft Azure AI Fundamentals (02/10/2023), Microsoft Azure Data Fundamentals (01/12/2023), AWS Certified Cloud Practitioner (CLF-C02) (01/09/2025)

Languages: French (Professional), English (Professional)

Extracurricular Activities: Active Member of NATEG – ENET'Com