

EDUCATION

National Engineering Degree in Computer Science, National School of Computer Science (ENSI)	SEP 2020 — SEP 2023
Master's in Research in Intelligent Systems, National School of Computer Science (ENSI)	SEP 2022 — SEP 2023

EXPERIENCE

Data and Machine Learning Engineer Predictive Models for Neurological Diseases Knowlepsy	DEC 2023 — Present Tunisia, Remote
<ul style="list-style-type: none">Developed and deployed models for various health metrics, correlating with the main model to improve performance by 23%.Built an automated interactive dashboard using Dash and PostgreSQL, reducing manual reporting tasks by 30%.Documented models and implemented unit tests to ensure robustness and reliability.Created scalable ETL pipelines using Azure, achieving a throughput of 10,000 records/sec while maintaining 96% availability.Performed extensive research on state-of-the-art AI techniques to align with industry standards.Contributed to AI projects in time series (wearables), LLMs (chat interactions and form responses), and computer vision (meal detection and activity tracking).	
Data Science Research Assistant Optimizing Pulmonary Care Pathways Institute of Intelligence and Data (IID)	MAR 2023 — AUG 2023 Canada, Hybrid
<ul style="list-style-type: none">Conducted a systematic review, screening 1,200 articles on AI biases in healthcare.Optimized patient admission management by 12%, based on predictions of diagnosis, severity, and length of hospitalization.Presented findings to the team and authored a report to continue solution implementation in production.	
Data Science Intern Extraction and Conversion of Financial Statements to CSV AxeFinance	JUL 2022 — AUG 2022 Tunisia, On-Site
<ul style="list-style-type: none">Automated data extraction from financial statements using Docker and OCR, reducing manual effort by 66%.Implemented a scalable pipeline for table detection, text parsing, and CSV conversion, improving processing speed by 28%.Orchestrated services with Docker Compose, enabling scalable processing of financial data.	

PROJECTS AND ACHIEVEMENTS

Olive Tree Crop Mapping at the Parcel Level in Central Tunisia AGEOS African Association for Geospatial Development	Rank 1 76 Tunisia, On-Site
<ul style="list-style-type: none">Used Sentinel-2 TIF data and spatio-temporal models to map olive tree crops at the parcel level.Achieved an accuracy of 85.29% in the competition.	
Biomass Prediction in Cocoa Plantations in Côte d'Ivoire GIZ German Society for International Cooperation	Rank 26 1202 Tunisia, Remote
<ul style="list-style-type: none">Fine-tuned a LightGBM model for biomass prediction using Sentinel-2 imagery.Performed outlier treatment, feature engineering with 187 vegetation indices, and cloud masking to improve model accuracy.Achieved an RMSE of 78, using 25-fold cross-validation and top-performing vegetation indices.	

SKILLS

Programming Languages	Python, C++
Cloud Computing and Containerization	Azure
Containerization	Docker
Database Management	SQL (MySQL, PostgreSQL), NoSQL (MongoDB)
Version Control and Project Management	Git, Azure DevOps
MLOps	MLflow, Kubeflow, Model Deployment, CI/CD
Data Engineering	Data Pipelines, Apache Spark, ETL, Airflow
Soft Skills	Collaboration, Leadership, Communication
Languages	English, French, German, Arabic

ACTIVITIES

Data Science Competitor on Kaggle and Zindi	2022 — Present
Member of the Red Crescent, Hammam Sousse Local Committee	2022 — Present
External Relations Coordinator at NATEG Tunisia	2021 — 2022