



# Ons Sfaxi

Junior Data Scientist

Mahdia, Tunisia  
+216 26158805  
sfaxi.ones@gmail.com  
linkedin.com/in/ons-sfaxi  
github.com/Ons-sfaxi

## Profile

Data Scientist / Machine Learning Engineer with strong background in data analytics, decision-making systems and predictive modeling. Experienced in designing data pipelines, preparing and analyzing heterogeneous datasets, feature engineering, and training ML/DL models. Passionate about building intelligent data-driven solutions with Python and modern AI tools.

## Professional Experience

### GTI – Final Year Project: AI-based Virtual Assistant

Feb–Jun 2025

- Designed an intelligent virtual assistant with a complete data pipeline, preprocessing, and feature engineering.
- Developed and trained ML/DL models for intent recognition and entity extraction ; integrated LLaMA 3.2 with RAG.
- Built REST APIs and React frontend; ensured AI safety and domain control with NeMo Guardrails.

### AllNet – Engineering Internship

Jun–Aug 2024

- Developed an interactive AI agent interface using Symphony and React, integrating LLaMA 3 for natural language interaction.

## Education

### Engineering Diploma – Telecommunication & Network (Data Science Orientation) 2022–2025

National Engineering School of Gabès (ENIG)

Key coursework: Machine Learning, Statistics, Artificial Intelligence

### Pre-Engineering Diploma – Physics & Chemistry

2020–2022

Preparatory Institute for Engineering of Nabeul (IPEIN)

## Projects

### Network Intrusion Detection (2025)

- Built an end-to-end data pipeline for network traffic analysis, including preprocessing, feature selection, model training, and evaluation.
- Implemented and compared Random Forest and XGBoost models to identify the most effective approach for anomaly detection.

### Facial Emotion Recognition (2024)

- Developed a real-time facial emotion recognition system using a CNN model, including data preprocessing, feature engineering, and model evaluation.
- Processed multimodal data (images and metadata) to support accurate emotion detection.

## Technical Skills

**Data Analytics:** Pandas, NumPy, Matplotlib, Seaborn, Data Visualization, Decision-Making Support

**Machine Learning:** Scikit-learn, Random Forest, XGBoost, Model Evaluation, Feature Selection

**Deep Learning:** TensorFlow, PyTorch, CNN, NLP, Fine-Tuning, Multimodal Data Processing

**Data Engineering:** Data Pipelines, ETL, Feature Engineering, Data Integration

**AI Tools & LLMs:** LLaMA, DistilCamemBERT, LangChain, RAG, AI Safety, Intent Recognition, Entity Extraction

**Databases & Backend:** SQL, MongoDB, REST API

**Programming & Tools:** Python, Git, Linux, R ,RStudio, React , PHP, SpringBoot

## Soft Skills

- Strong problem-solving and analytical thinking
- Teamwork and effective communication
- Adaptability and fast learning
- Time management and attention to detail

## Languages

**French:** Fluent

**English:** B2

## Certifications

Microsoft AI Fundamentals | Microsoft Azure Fundamentals AZ-900 | Scrum Fundamentals | Google Data Analytics Professional Certificate