# **DHIA HMILA**

#### Senior Data Scientist at AXA France

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### PROFESSIONAL EXPERIENCE

#### Senior Data Scientist

#### **Data Science Team, AXA France**

- June 2021 Present
- Nanterre, France
- Development of document classification model using Computer Vision (Vision Transformer, VGG16, openCV, ...) to automatically index AXA's Document management system (GED).
- Building a reusable Azure ML Pipeline to automatically retrain an Al System (Yolov5, tesseract, VGG16, Vision Transformer, ...) used for information extraction (Driver's license, National ID card, Passeports ...)
- Defining CI (Continuous Integration), CD (Continuous Deployment) & CT (Continuous Training) Templates for the Team's projects.
- Leading AXA's "Python COP" and organising a series of monthly programming talks/events (e.i. testing, Web Scraping, packaging, code quality, ...)
- Leading a series of training sessions/courses on Python, Data Manipulation (pandas & pyspark), Software Engineering best practices for AXA collaborators

### Graduate Program - Data Scientist

#### Data, Fraud, Waste & Abuse Team, AXA France

- May 2020 June 2021
- Nanterre, France
- Development of an Al-based Fraud, Waste, and Abuse Detection Tool that acts on various scopes (Claims, Health Providers, Beneficiaries, ...) & Deployment on Databricks
- Creation of various fraud detection models for fraudulent patterns as part of the FWA detection tool.

### Data Scientist

### Shift Technology

- April 2019 March 2020
- Paris, France
- Use of NLP technologies for clustering Claim managers' notes and visualizing results for detecting new patterns of fraud
- Build Al Models for Shift's fraud detection solution & Deployment for a new customer

### **PROJECTS**

nbmanips: Split, merge and convert IPython Notebooks

Jupyter Databricks Zeppelin

May 2021 - Present

An open-source package containing a collection of tools to manipulate Notebooks via a python or CLI.

☐ Spot-Language: Programming Language Detection

### **ABOUT**

I'm a passionate Data Scientist and a programming enthusiast. I've worked on fraud/anomaly detection and document classification problems

### **EDUCATION**

#### Engineering double degree

- ENSTA ParisTech
- **≅** ENIT
- **2016 2019**
- France Tunisia

Specialized in Artificial Intelligence

### Preparatory School

- 🙎 IPEIT
- Esprit Prépa
- **2014 2015**
- France Tunisia

Specialized in Mathematics & Physics Ranked 10th in the entrance exam for engineering schools among 3,000 candidates.

### **SKILLS**

### **Artificial Intelligence**

Anomaly Detection Tensorflow TFX

scikit-learn NLP nltk spaCy Gensim

pyod

#### **Data Wrangling**

pandas pyspark SQL ETL

### **Programming Languages**

Python C/C++ C# JavaScript

#### **MLOps**

Github Workflows Azure Pipelines Git

Linux Docker Azure ML Databricks

**Web Scraping** 

Classification Flask NLP **Model Compression** 

January 2020

Spot-Language is a classification model to detect the language used in code snippets.

- Construction of a Training dataset from github public repositories.
- Deployment of Web Application to serve as demo of the ML Model.

**₽** Dmail downloads>100k email markdown

April 2020 - May 2020

A python package to write & send emails in markdown format

selenium

requests

BeautifulSoup4

### **LANGUAGES**

Arabic **English** French



## **CERTIFICATES**

Cloud-Native Development with Open-**Shift and Kubernetes Specialization** 

Coursera

**2023 2023** 



Machine Learning Engineering for Production (MLOps)

Coursera

**2022 2022** 



Machine Learning & General Coding Logic

Triplebyte **2023 2023**