# Dridi Oumaima

# Data Science Engineer

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#### **PROFIL**

Data Science Engineer specialized in designing, deploying, and optimizing advanced analytical solutions. An expert in machine learning and deep learning, I transform data into strategic insights, guiding the creation of predictive models and efficient data pipelines. Innovation-driven, I contribute to continuous process improvement through constant technological vigilance.

#### PROFESSIONAL EXPERIENCE

#### **IUNIOR DATA SCIENTIST**

**TUNIDESIGN** 

• Extraction of textual data from unstructured web sources.

- Data cleaning and integration into a MongoDB database for efficient access and manipulation.
- Developing analytical tools and algorithms to improve research and targeting solutions.

Keywords: TensorFlow/Scikit-learn/Selenium/NLP/MongoDB/YOLO/Darknet

# **Artificial Intelligence Engineer**

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• Design and implementation of a medical image processing system combining advanced MRI image preprocessing with a diverse range of brain lesion segmentation techniques.

• Creation of a data augmentation pipeline using GAN Pix2Pix, enhancing the robustness of the UNet model.

• Providing a user-friendly interface for healthcare professionals, featuring DICOM image import, MRI sequence classification, 2D display with DICOM tags and patient information, application of filters, brain lesion detection, and image export in various formats.

**Keywords:** PyTorch/Matplotlib/Chan-Vese/K-means/GMM/Laplacian/Canny/Brain Mask/CPU

# **Engineering Internship**

Axia solution ∅

• Developed a code to detect non-compliant medical tablets using YOLOv5, ResNet50, Autoencoder, and GAN.

• Deployed a machine learning model with Flask.

**Keywords:** Google Colab/Neural Networks/Recall/Accuracy/AUC-ROC

# **Internship Company Integration**

Telnet Holding *⊘* 

- Design of a table detection system in scanned images.
- Image labeling with LabelImg.
- Object detection using RCNN and Faster RCNN.
- Performance evaluation with metrics: Precision, Recall, F1-Score.

Keywords: Python/Keras/Numpy/Pandas

# **EDUCATION**

## National Engineering Degree in Computer Science

Private Higher School of Engineering and Technology *⊘* 

Preparatory Cycle in Physics and Chemistry

Faculty of Sciences of Tunis ∅

Ariana, Ghazala

06/2022 - 10/2022

Sousse, Msaken

11/2023 - 09/2024

02/2023 - 09/2023

Tunis, Monplaisir

Tunis, Tunisie

06/2021 - 09/2021

2019 - 2023 Ariana, Ghazala

> 2017 - 2019Tunis, Tunisie

## **TECHNICAL SKILLS**

- python, R, Java, CSS, PHP, html
- · Machine learning, Deep learning, NLP
- Hadoop, Apache Spark, Apache hive
- SQL, NoSQL, MongoDB
- Linux
- Flask
- Docker, Github/Git
- Power BI
- Spring Boot
- Microsoft Azure services

## **LANGUAGES**

# **ACADEMIC PROJECTS**

## **NLP Project**

Recommendation System

- Knowledge extraction from an unstructured corpus, specifically PMBOK 6.
- Preprocessing of PMI frameworks using NLP & ML.
- Domain ontology modeling.
- Semantic analysis.

#### **Data Science Project**

Used Car Price Estimation Application

- Data collection using Beautiful Soup and data cleaning.
- Data visualization through a dashboard via Power BI.
- Deployment of a client-specific application using Flask.

### **Devops** project

Pipeline Creation

- Creation of the Spring deliverable from a Dockerfile.
- Uploading the created image to DockerHub/Nexus.
- Simultaneously launching the image containing the Spring deliverable and MySQL using Docker Compose.
- Testing the application services with Postman (static testing with SonarQube).

#### **Event Management**

Development of an event management task.

• Desktop component (Java), Web component (Spring Boot), Mobile component (Codename One).

#### **INTERESTS**

Kickboxing | Reading | Theater