## ABDELMOUHAIMEN SARHANE

Computer Vision and Artificial Intelligence Student at INP-ENSEEIHT seeking a summer internship with the goal of progressing to an apprenticeship in 2024/2025.



in Abdelmouhaimen

# PROFESSIONAL EXPERIENCE

## IT Researcher and Developer Internship | ENAC | June 2023 - July 2023

- Conducted energy consumption assessment in matrix computations for compressed data.
- Developed C applications to compare compressors such as Blaz and ZFP using PowerJoular, while also applying them in the sports analysis field, particularly in creating heatmaps for player movement.
- Contributed to the writing of a paper which was accepted at the ICT4S 2024 conference.

#### **EDUCATION**

#### Image processing and Artificial Intelligence | INP-ENSEEIHT | 2022-2025

- Advanced coursework in Artificial Intelligence methodologies, including Computer Vision, Deep Learning, and Image Processing.
- Extensive training in Concurrent Systems, Distributed Data, and Model-Driven Engineering.
- Diverse courses ranging from applied mathematics, Statistics, Optimization, Operations Research, artificial intelligence to business strategy, sustainable development, and project management.

MPSI/PSI Preparatory Classes | CPGE SAINT-BENOIT - Angers | 2020-2022

#### **PROJECTS**

#### Academic Projects | Deep Learning and Computer Vision | 2024

- Implementation of neural networks with numpy. Dogs and cats Classification. Posture estimation. Object Detection and Localization.
- Traffic Sign Image Classification, Data preprocessing and augmentation efforts, Model optimization techniques to prevent overfitting and improve generalization

#### Personal Project | Traffic light optimization with AI | 2023

- Convolutional Neural Network (CNN) model for the classification of European traffic sign images
- Data preprocessing and augmentation efforts to enhance model training and accuracy
- Model optimization techniques to prevent overfitting and improve generalization
- Technologies Used: Python, TensorFlow, Keras, Matplotlib

#### Academic Project | Desktop App: RevEasy - Interactive Java Swing learning platform | 2022

- Swing GUI: Navigation, content management, text formatting
- Quiz Mechanisms: Personalized review options, backend logic implementation.

#### Personal Project | CS50X PERSONAL PROJECT - WEB APPLICATION | 2021

Developed a Python-based web application using Flask, integrated with PostgreSQL for database management akin to phpMyAdmin, enabling easy viewing and editing of Heroku databases with a user-friendly interface.

#### **SKILLS**

- Python & libraries (sklearn, pomegranate, scipy, tensorflow, nltk, openCV), SQL, R Studio, Microsoft Office (PowerBI, Excel, PowerPoint), Java, OCamL
- Machine Learning & Al, Optimization, Statistics & Mathematical Modeling
- Effective Project Management and Collaboration, Innovative Leadership, and Strategic Problem-Solving.
- Languages: English (Fluent), French (Fluent), Arabic (Native) & Spanish (Beginner), Japanese (Beginner)

### **CERTIFICATIONS**

- IBM AI Engineering Professional Certificate
- Python CS50P and CS50x Certificates in Advanced Python & Web Development
- Cambridge Linguaskill Business English Certificate: C1 or above