# KHELLOUFI Naoual

Artificial Intelligence Engineer

Sale / Morocco

07 10 49 10 41 | khelloufinaoualpro@gmail.com | www.linkedin.com/in/naoual-khelloufi

#### **Education**

Master's in Artificial Intelligence and Virtual Reality

2023 - 2025

#### Faculty of Science of Kenitra, Kenitra

Bachelor's Degree in Computer Engineering

2019 - 2023

### Multidisciplinary Faculty of Taza, Taza

## **Experience**

#### Final Year Project - NLP RAG System, 3D Smart Factory, Mohammedia

(February - July) 2025

- Developed an interactive web interface that allows users to ask questions and receive answers based on their uploaded documents using a RAG system.
- Designed the interface with Streamlit, supporting file upload and visualization (PDF, TXT, DOCX, CSV).
- Integrated nomic-embed-text for semantic vectorization and LLaMA 3.2 for answer generation, orchestrated via LangChain.
- Implemented an intelligent chat system connected to a ChromaDB vector database to provide accurate and contextual responses.

Freelance - Sales & CRM Assistant, Germania Autos - Egyptian car export company

(July - August) 2024

- Export cars from China, Germany, and the UAE to Egypt.
- Managed 100 clients through WhatsApp and Facebook, providing customized recommendations based on their budgets.
- Handled commercial content publishing on Facebook and maintained client records using Odoo CRM.
- Initiated contact with car exhibitions and trade shows to explore business partnership opportunities.

#### Internship in the IT department of the HR Service, Municipality of Taza, Taza

(August – September) 2022

- Observation internship.
- Assisted in managing employee data and coordination of civil servant activity.

#### **Projects**

## Platform for handwritten non-Latin character recognition: Tifinagh

2025

- Development of a platform enabling the conversion of handwritten Tifinagh texts into digital format.
- Conducted literature review (state of the art) and facilitated Agile project initiation (scrum master).
- Pre-processed the image dataset: conversion to grayscale, resizing, and data augmentation.

#### **Image Caption Generation Model**

2024

- Designed an encoder-decoder model that combined CNN (VGG16) for visual feature extraction and LSTM for text generation.
- Pre-processed data to extract visual features and vectorize textual descriptions.

#### **Handwritten Digit Recognition**

2024

- Deep learning-driven image classification relies on supervised CNNs.
- Used the LetNet architecture and the MNIST dataset.

#### **Financial Fraud Detection: Credit Card Transactions**

2023

- Developed a supervised classification system.
- Performed data preprocessing: encoding categorical variables, handling missing values, and class balancing through oversampling.
- Compared the performance of Random Forest, Logistic Regression, and Decision Trees.

## 360 degree videos on the Web: Experiment with 360-degree technology

2022

Creation and publication of 360 degree videos on the web using the following concepts: stithing, metadata injection,
360 degree and panoramic images.

- Technologies: Hugin, Blender, Spatial Metadata Injection.

## **Technologies**

Data Science and ai: machine learning, deep learning, data pre-processing, image processing, NLP.

Libraries: NumPy, Pandas, Seaborn, Matplotlib, Scikit-learn, TensorFlow, PyTorch, Keras, Langchain.

**Programming and web development :** Python, C, C++, Java, HTML5, CSS3, SQL, UML.

**Tools and environments :** Jupyter Notebook, Google Colab, Kaggle, Visual Studio code, Jira (Agile: Scrum), Odoo (CRM), Git, Microsoft Project.

## **Extra-curricular activity**

logistic team member, Pragnomos Club, Faculty of science of Kenitra, Kenitra

Since 2024

- Pragnomos is a club dedicated to simplifying AI concepts and building a community passionate about artificial intelligence.
- Participated in the organization of a welcome event for new students.

#### Soft skills

- Fast learning, flexibility, autonomy, and time management.
- Adaptability, team spirit, communication, and active listening.
- Analytical and problem-solving skills, attention to details.

## Languages

French: Fluent English: Intermediate Arabic: Native

#### **Interests**

- Artificial intelligence applied to sales and marketing
- Virtual reality