Personal vehicle



# **Cleque Marlain MBOULOU-MOUTOUBI**

THESIS RESEARCH: CIFRE IN VISION/IA - UNSUPERVISED LEARNING OF A LATENT EMOTIONAL REPRESENTATION IN FOOD SCIENCE



## **WORK EXPERIENCE**

### **Artificial Intelligence Internship**

Creation of a neural network for Arduino and application to colour management

From May 2023 to July 2023 XLIM-AXE Mathématiques et Sécurité de l'Information Limoges

#### Maths tutor for Licences 1 students

From 2021 to 2023 University of Limoges

Multi-skilled hotel employee (été 2021,2022 & 2023)

From July 2021 to August 2023 Camping La Brande Le Château-d'Oléron



### **MASTER 2 INTERSHIP**

# **Deep Learning Intership**

Clecim SAS Savigneux, 42600 From March 2024 to July 2024 Mission:

Data processing optimisation. Creation of custom pipelines and a supervised learning model Transfer Learning

Anomalies detection (AE, VAE) Focus on self-learning for computer vision.

Identify and develop the best algorithm for pre-training neural networks using unlabelled images. Explore the integration of artificial defects in the learning process to enhance the robustness of the algorithms.

### **Responsibilities:**

Optimising the performance of the algorithms while reducing dependence on labelled image databases.

Models comparison tool



# **PROJECTS COMPLETED** MASTER 2

# Master 2 (in English)

Faculty of Science and Technology From 2023 to 2024

Machine learning with Scikit-learn, Deep Learning( CNN, RNN, GAN, Transformers).

Reinforcement Learning: Policy evaluation, policy improvement and policy iteration

Numerical Solutions and Image Reconstruction using Projection Methods (Proximal Algorithms)

Tensor Decomposition and **Dimensionality Reduction** Algorithms: CP-ALS, HOSVD, and

Convex Optimization: FISTA, Greedy-FISTA, ADMM

Game theory



# **UNIVERSITY COURSES**

### Masters 1 and 2, Applied Mathematics, ACSYON pathway

Faculty of Science and Technology of Limoges From 2022 to 2024

Proficient in Linear and Multilinear Algebra,

Convex Analysis, Convex Optimization Statistics,

Machine Learning, Deep Learning, Reinforcement Learning Stochastic Optimization, Game Theory,

Fast Algorithms

### **Bachelor's degree in Mathematics**

Faculty of Science and Technology

From 2019 to 2022



# 🖼 LANGUAGES AND **INTERESTS**

#### English

B1: Written and spoken everyday and technical vocabulary

### Interests

Football, basket-ball, gym



# **SOFT SKILLS**

Volunteer Team spirit, ability to make proposals Thorough and inquisitive, good listening skills



# **COMPUTER SKILLS**

Python, SageMath, C+, Matlab, Octave, Maple

LaTex, Word, Excel, Power Point, **Libre Office**