



VIN Charles

Junior Data Scientist internship

 CharlesAttend

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Education

- 22-24 • **Master's Degree in Computer Science - Specialisation Data, Machine Learning, and Knowledge (DAC)**
Sorbonne University - Paris
- 19-22 • **Bachelor's degree with highest honour, Mathematics and Computer Science applied to Cognitive Science**
University of Lille - Lille

Experiences

- 23-S2 • **Research project - Explainable insects classification - ISIR - Paris**
 - Development of a **convolutional neural network** for insect classification.
 - Use of gradient-based approaches and the LIME and SHAP frameworks.
 - Takeover, adaptation and documentation of the project.
 - Experiences monitoring and evaluation of different models with WandB.

Pytorch **CNN** **LIME** **SHAP** **WandB**
- 23-S2 • **Project - Neural Network DIY**
 - Development of a neural network library entirely in Numpy.
 - Implementation of essential modules (linear layers, 1D convolutions, etc.) for creating, training and evaluating neural networks.
 - Performance optimization through advanced use of Numpy for efficient computation.

Python **Numpy**
- 22 Summer • **Internship – Filboost & SCALab Laboratory - Lille**
 - **Processed raw EMG/ECG signals** and experimental task data.
 - Employed **data visualization** techniques.
 - Utilized statistical tests to uncover experimental group differences.
 - Delivered presentations and reports to communicate findings effectively.

Pandas **Seaborn** **Signal processing** **Statistical tests**

Skills

Machine Learning	SVM, deep neural networks , gaussian process, unsupervised method, bayesian network, decision tree, RNN , GNN, eXplainable AI (LIME, SHAP, counterfactuals)
Computer Vision	Image Classification, vision transformers, GANs, segmentation & detection, diffusion models
Databases	SQL , XML, JSON, distributed databases
Mathematics	Statistical learning , convex optimization (from Master opening courses), decision statistics, linear programming , signal processing
Programming	Python (PyTorch , Scikit-Learn, Seaborn, Pandas, Numpy, NLTK, OpenCV), R , MATLAB, web front-end (React, Svelte)
Other	(Arch) Linux, organization using Notion, LaTeX, Git, Docker , Figma, Photoshop, Premiere
Languages	English C1 (2022 - TOEIC - 955/990), French (native)

Miscellaneous

Interests	DIY Project: portable smart TV, smart plant, portable secondary monitor, 3D-Print, ... Plants, gardening et resilient living. Cooking: meal prepping & home cooking.
Sports	Running, climbing, bivouac.
Extra work	Seasonal jobs, volunteer work: electronic music festivals and parties.
References	References on request