

Ilyas Moutawwakil

Data Science intern



Personal details



Ilyas.Moutawwakil@gmail.com



+33749346131



github.com/IlyasMoutawwakil



linkedin.com/in/ilyas-moutawwakil

Skills

Data Analysis & Data Visualization

Machine Learning & Deep Learning

Image processing (Computer Vision)

Time Series Analysis & Forecasting

Natural Language Processing (NLP)

Languages

English

French

Arabic

German

Some Certificates

Data Science Professional Certificate
(IBM)

Deep Learning Specialization
(DeepLearning.AI)

Generative Adversarial Networks
Specialization (DeepLearning.AI)

TensorFlow: Data and Deployment
Specialization (DeepLearning.AI)

Profile

Engineering student at CentraleSupélec and Data Science intern at Sysnav (until January). Passionate and experienced in the fields of AI, Data Science and Machine Learning / Deep Learning. Looking for my second internship in one of these domains as part of my Gap Year.

Employment

Data Science intern

Jul 2021 - Present

Sysnav, Vernon

As part of the Traffic Security team, my missions were as follows:

- Retrieval, processing and visualization of data from the ELK stack.
- Exploratory Data Analysis of hundreds of millions of spatio-temporal data points.
- Study of statistical Forecasting algorithms (parameterized and non parameterized).
- Forecasting of spatio-temporal performance metrics.
- Deployment of a platform (DashBoard) for monitoring, visualisation and Forecasting.

Web Administrator

Jan 2020 - Jan 2021

Automatants - Association d'IA de CentraleSupélec

On the campus of the University of Paris Saclay, I was responsible for:

- Maintaining and developing the association's website ;
- Co-organising the association's main event Soirée de l'IA ;
- Organising a lecture and a tutorial about CNN architectures;

Education

General Engineering - Specialty in Data Science.

Sep 2019 - Present

CentraleSupélec, Gif-sur-Yvette

A diversified and customised curriculum. These are some of my subjects: Computer Science, Big Data, Machine Learning, Probability and Statistics, High Performance Computing, Game Theory, Self-Driving Cars, Networking and Cybersecurity, Electronics, Quantum Physics, Industrial Engineering, Management and Administration, Law, etc.

Industrial Science and Technology

Sep 2017 - Jul 2019

CPGE Lycée d'Excellence de Benguerir, Benguerir

Intense curriculum with satisfying results:

- 1st in the Concours National Commun.
- 2nd in the Concours Commun Polytechnique/INP (+ ENS).
- 4th in the Concours Centrale-Supélec (+ Mines Ponts).

Projects & Contributions

SkTime

2021

Contributing to the Open Source

A unified framework for Time Series Analysis and Machine Learning.

Contribution: Adding features, enhancing models (Prophet) and fixing bugs along the way.

PyGeohash

2021

Contributing to the Open Source

Python module that provides functions for decoding and encoding geohashes.

Contribution: I re-coded their algorithms in Numba for speed up and added vector-wise operations for a tenfold gain in performance.

CycleGAN

2020

Research training project

Study and implementation (on Numpy, Tensorflow and Keras) of a CycleGAN from the scientific papers by mastering all the basic blocks in the architecture (MLP, CNN, GAN, optimizers, etc.). And final modifications to adapt this algorithm to the task of patching damaged images.

License Plates Detector

2019

Personal initiative work

Study and implementation of the possible solutions for license plate detection using different approaches (OCR, Image Processing, HaarCascade, morphological transformations, etc.). Then final touches and deployment of the solution with the best performance: the YOLO algorithm with a SqueezeNet architecture at its backbone for real-time detection and a MobileNet to filter out false positives.