# Hugo Le Moine

#### DATA SCIENCE · PYTHON PROGRAMMING

□ +33 6 35 26 40 40 • ► hugo.le-moine@outlook.fr • □ hugo-le-moine • ★ hugolmn.github.io

Data scientist with 4 years of experience leveraging data science in healthcare and aerospace industries.

# Work Experience \_\_\_\_\_

### **Pierre Fabre Group** — Data Center of Excellence

Lavaur, France Sep. 2021 — now

DATA SCIENTIST

- Created a Key Opinion Leader identification and mapping platform from scratch: 100k-1M€ saved annually.
- NLP applied to clinical trials, automated chem-genomics database crossing: screening time cut by >1000 hrs.
- Network and graph theory applied to email interactions, to monitor the organizational effectiveness.

## **Airbus Commercial Aircraft** — Acoustics Department

Toulouse, France

Sep. 2018 — Aug. 2021

DATA SCIENTIST APPRENTICE

- Anomaly detection in flight noise recordings and automation of the cleaning: costs and time cut by >90%.
- Data analysis to monitor production quality and perform root cause analysis of identified drifts.
- Clustering of flight trajectories to improve noise map accuracy and facilitate traffic growth simulations.
- Optimization of engine design to increase efficiency using genetic algorithms and neural networks.

# **Academic Projects** \_

## **University of Waterloo** — Ubiquitous Health Technology Lab

Waterloo, Canada

RESEARCH PROJECT IN COOPERATION WITH UTC

Sep. 2020 — Jan. 2021

- Analysed and cleaned motion data from 100 000+ smart thermostats (>600GB of data).
- Prediction of the number of occupants in homes to study the impact of confinement on habits.

#### **SNCF** — French National Railway Company

Paris, France

EXPERIMENTAL TEAM PROJECT, SUPERVISED BY SNCF RESEARCHERS

Feb. 2020 — June 2020

- Optimized the economic performance of high-speed trains by searching the most efficient design of operation.
- Reduced energy consumption and respected a constraint of delay, using dynamic programming.

# **Education** \_

# University of Technology of Compiègne (UTC)

Compiègne, France

5-YEAR COMPUTER SCIENCE AND ENGINEERING DEGREE (EQUIV. MSc) — GPA: 4.49/5.00

Sep. 2015 — Aug. 2021

- Computer science, information technology, databases, operations research, mathematics & statistics.
- Economics, competitive intelligence, business strategy.

#### **Riga Technical University**

Riga, Lettonie

6-MONTH EXCHANGE PROGRAM (ERASMUS)

Août 2017 — Jan 2018

 $\bullet \ \ \text{Courses in English} - \text{AI, object-oriented programming, business analytics, IT project management.} \\$ 

#### Skills

Pvthon Data processing (pandas · numpy · dask) · Data visualization (matplotlib · seaborn · plotly)

Machine learning & NLP (scikit-learn · tensorflow · XGBoost · spacy) · Optimization (scipy · pymoo)

 $\textbf{Programming} \quad \text{Python} \quad \text{SQL} \quad \text{NoSQL} \quad \text{Spark} \quad \text{C/C++} \quad \text{R} \quad \text{Prolog} \quad \text{HTML/CSS} \quad \text{Flask/Dash}$ 

**DevOps** Git · Docker · Kubernetes · AWS · Azure/Databricks · Palantir Foundry · Kubeflow

# Languages \_

French (native) · English (C1 - TOEIC 985/990) · Spanish (B2) · Chinese (HSK3) · Latvian (A1)

# **Extracurricular Activity** \_

Since 2018 **Training Manager & Photographer**, Pics'art — photography skills development organization

2018 — 2019 Local Representative, Head of Communication, Erasmus Student Network Compiègne

2016 — 2017 President, La Foulée UTCéenne — running club

2015 — 2017 **Volunteer Rescue Worker**, La Croix Blanche — first-aid organization