# 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 methods to solve industry challenges.

# Work Experience \_

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

Lavaur, France

DATA SCIENTIST

Sep. 2021 — now

- Key Opinion Leader mapping by scrapping & building data pipelines using Kubeflow and Snowflake.
- NLP applied to clinical trials to automate chemgenomics database crossing, accelerating experts' screening.
- Organizational effectiveness: graph theory applied to interactions, to monitor the company's transformation.

# **Airbus Commercial Aircraft** — Acoustics Department

Toulouse, France

DATA SCIENTIST APPRENTICE

Sep. 2018 — Aug. 2021

- Anomaly detection in flight recordings and automation of the cleaning: costs and time cut by >90%.
- Data analysis: monitoring of production quality and root cause analysis of identified drifts.
- Clustering of flight trajectories to improve noise map accuracy and facilitate traffic growth simulations.
- Optimization of engine design using genetic algorithms and surrogate modeling (deep learning).

# 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, operations research, mathematics & statistics.
- Economics, competitive intelligence, business strategy.

# **Riga Technical University**

Riga, Lettonie

6-MONTH EXCHANGE PROGRAM (ERASMUS)

Août 2017 — Jan 2018

• Courses in English — AI, object-oriented programming, business analytics, IT project management.

#### Skills

Data processing (pandas · numpy · dask) · Data visualization (matplotlib · seaborn · plotly) Python Machine learning (scikit-learn · keras/tensorflow · XGBoost) · Optimization (scipy · pymoo)

Python · SQL · Spark · C/C++ · R · Prolog · HTML/CSS Programming

**DevOps** Git · Docker · AWS · Azure/Databricks · Palantir Foundry/Skywise · 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