Hugo **Le Moine**

Data Science · Python Programming

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Soon to graduate data scientist apprentice with 2+ years of experience and a proven ability to use machine learning in an innovative way. Looking to secure a data scientist position starting September 2021

Work Experience

Airbus Commercial Aircraft — *Acoustics Department* *Toulouse, France*
Data Scientist Apprentice *Sep. 2018 — (Aug. 2021)*

- Designed a pipeline to automatize cleaning of audio recordings using **anomaly detection**: costs slashed by >99% and required time reduced by >90%.
- **Data analysis**: highlighted production quality drifts and identified root causes ; determined contributors to specific aircraft noise variability.
- Performed **multi-objective optimization** of design : improved performances at constant noise, using evolutionary algorithms and **deep learning** .

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).
- Trained models to predict the number of occupants in homes with **>70% accuracy**.

SNCF — *French National Railway Company* *Paris, France*
Experimental team project, supervised by SNCF researchers *Feb. 2020 — June 2020*

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

Skills

Python	Data processing (pandas, numpy, spark, dask) · Data visualization (matplotlib, seaborn, plotly) Machine learning (scikit-learn, keras, XGBoost) · Optimization (scipy, pymoo)
Programming	SQL, C/C++, Prolog, HTML/CSS, (basics: R, PHP, Lisp, x64 Assembly)
Database	MySQL, PostgreSQL, MondoDB, Oracle, neo4j
DevOps	Linux, Git, Docker, Azure, Anaconda

Langues

Français (native) · English (C1) · Spanish (B2) · Chinese (HSK2) · Latvian (A1)

Education

University of Technology of Compiègne (UTC) *Compiègne, France*
5-year Computer Science and Engineering Degree (equiv. MSc) — CGPA: **4.43/5.00** *Sep. 2015 — expected Aug. 2021*

- Computer Science — algorithms, data structures, programming (object-oriented, logic)
- Information Technology — networks, cloud, databases
- Operations Research — routing, optimization, logistics
- Mathematics & Statistics

Riga Technical University *Riga, Lettonie*
6-month Exchange Program *Août 2017 — Jan 2018*

- Courses taught in English — AI, programming, business analytics & project management

Extracurricular Activity

Since 2018	**Training Manager & Photographer**, Pics'art —	*photography skills development organization*
2018 — 2019	**Local Representative, Head of Communication**, ESN Compiègne —	*international student organization*
2016 — 2017	**President**, La Foulée UTCéenne —	*running club*
2015 — 2017	**Volunteer Rescue Worker**, La Croix Blanche —	*first-aid organization*