

# Barthélémy Charlier

Motivated, hard-working, and research-oriented 3rd year engineering student with strong communication and coding skills. Currently completing a Master 2 at PSL and seeking a 6 month research internship starting in spring to contribute to impactful technologies.

## Education

### Université Paris Sciences et Lettres

Sept 2025 – Sept 2026

#### Master 2 in Artificial Intelligence, Systems, Data

- **PSL Master's degree** [✉](#) coordinated by ENS, Mines Paris and Université Paris Dauphine
- **Coursework (so far):** Large Language Models, Reinforcement Learning, Deep Learning for image analysis, Data Science Lab, Fundamentals of ML, Optimization, Data acquisition, extraction, and storage

### EURECOM - Institut Mines-Telecom

Sept 2022 – Sept 2026

#### Engineering Degree specialized in Data Science

- **Relevant coursework :** Machine Learning and Intelligent Systems, Deep Learning and Algorithmic ML, Advanced Statistical Inferences,

### CPGE PC - Lycée Pierre-Gilles de Gennes

Sept 2020 - Jul 2022

## Experience

### Data Science Intern - Blunomy

Melbourne, Australia

#### Cæsura internship, Ref: Youssef Miftah ([youssef.miftah@theblunomy.com](mailto:youssef.miftah@theblunomy.com) [✉](#))

Feb 2025 – Aug 2025

- R&D on a Bayesian Neural Network for electricity demand prediction : Performance analysis, metric design, and hyperparameter tuning.
- Led a study on the impact of humidity on electricity demand prediction across Queensland.
- Documented how the model responds to unseen temperature in short-term electricity demand prediction.

### Data Analyst, International Junior of EURECOM

Sophia Antipolis, France

#### Contracted by the student-led company to provide a service for the institution

Feb 2024 – Jun 2024

- Implemented a data pipeline to display real-time energy savings on a presentation screen.

### Freelance Developer, HOFFMAN.AI

Off-site / Paris, France

#### Following Summer Internship / Continued as Freelancer

Jul 2023 – Dec 2023

- Contributed to the development of a flight comparison platform using ReactJs, NextJs, and Node.js.

## Projects

### Research Project – Multimodal Stress Identification from Videos, Audio and Physiological Signals (with Missing Modalities)

Feb 2024 – Jul 2024

#### Supervised by Maria A. Zuluaga ([Maria.Zuluaga@eurecom.fr](mailto:Maria.Zuluaga@eurecom.fr) [✉](#)), as part of the Inria & EURECOM StressID project

- Developed an RNN-based approach (GRU) for multivariate physiological time-series for stress recognition on the StressID novel dataset.
- Designed a data-handling system for corrupted EDA samples, yielding a +5% accuracy improvement over baseline ML models.

### Spring Semester Project – AI Programming in Python, Connect 4 Game Ranked 2<sup>nd</sup> out of 20 teams in the end-of-semester competition.

Feb 2023 – Jun 2023

- Implemented the AlphaGo Zero model for Connect 4, achieving a 90% improvement in competitiveness over the standard Minimax algorithm.
- Integrated the AI into an online multiplayer platform and successfully deployed it on a Raspberry Pi.

## Student Association

### Vice-President of the “Bureau des élèves”

Dec 2022 – Dec 2023

- Collaborated with a diverse team, catering mainly to an international student body

## Skills

### LANGUAGES

English - Professional level, C1  
Italian - Upper-Intermediate, A2+  
French - Native

### IT

SQL, Python, Dagster,  
SkLearn Pytorch, Pytorch  
Lighting, GCP, Polars  
 $\text{\LaTeX}$ , Git

### MISCELLANEOUS

Sailing – Very experienced  
Music – Bass & Singer at the Eurecom Music Club