

Augustin Bresset

 Blopausore |  Augustin Bresset |  augustin.bresset@ip-paris.fr |  +33 6 51 09 26 88 | Paris, France

SUMMARY

Passionate about research at the intersection of **mathematics, optimization, and computer science**. Currently pursuing a dual degree in **Data Science at École Polytechnique** and **Engineering at Télécom SudParis**. Aspiring to pursue a **PhD** focused on mathematical optimization and machine learning.

WORK EXPERIENCE

Software Engineer Intern - Rubicon (Bangkok) May 2025 - Aug 2025 (*Gap Year*)

- Sole developer rebuilding the company's ERP (40 employees) from scratch in **Odoo 18 Community**.
- Designed scalable **database schemas** (100K+ records) and developed **10+ custom modules** for pricing, production, and document management.
- Built automated **data import pipelines** to migrate large datasets from legacy systems.

Research Intern - ENSTA Paris (Palaiseau, France) Sept 2024 - Feb 2025 (*Gap Year*)

- Designed a prototype **Python framework** to standardize the handling of heterogeneous robotic datasets (**ROS bags, KITTI format**, etc.).
- Worked with **ROS** and **PyTorch** for data preprocessing and model testing within the laboratory's research environment.

Software Intern - Upfund (Paris, France) Jun 2023 - Aug 2023

- **Upfund** combines geospatial data and AI to help retail professionals identify optimal business locations.
- Built an **AI-powered map assistant** using **Django, Angular, OpenAI GPT API, and OpenStreetMap**, enabling users to perform complex location-based queries.
- Delivered a functional prototype presented to clients at the end of the internship.

EDUCATION

Master Data Science at Polytechnique 2025 - 2026

- Relevant coursework of Maths: High Dimensional Statistics, Hidden Markov Chain and Sequential Monte Carlo Methods, Convex Analysis, Optimization for ML, Stochastic Approximation
- Relevant coursework of CS: Deep Learning, Reinforcement Learning, Data Stream, Online Learning

Master of Engineering in Computer Science - Télécom SudParis 2022 - 2026

- Engineering curriculum focused on Statistics, Machine Learning, and Data Engineering.
- Relevant coursework: **Stochastic Processes, Extreme Value Theory, Neural Networks and Machine Learning, Reinforcement Learning** (GPA 4.0 / 4.0).

Auditor in the MVA Master's - ENS Paris-Saclay 2024 - 2025

- NPM3D: Point Cloud and Modeling (validated)

Preparatory Class (Maths & Physics, CS option) at Lycée Saint-Louis 2021 - 2022

- Equivalent to double license in Maths and Physics, with a specialization in Computer Science.

PROJECTS

- Swarm Rescue Challenge 2025** January - March 2025
- Ranked **5th out of 40+ teams** in a coding challenge organized by **CIEDS** and **ENSTA Paris**.
 - Developed a **multi-agent system** in Python for drone coordination in a search-and-rescue scenario.
 - Focused on a simple and robust design using **A***, **Gaussian Filtering**, and **Kalman Filtering** for localization.
- CodinGame Bot Programming** 2021 - 2024
- Regularly participate in online programming contests on **CodinGame**, exploring algorithmic and AI-based problem solving.
 - Reached the **Top 1% globally** in the *Ultimate Tic-Tac-Toe* challenge using **Alpha-Beta pruning**.
- Autotech - Intech' Robotics Club (Télécom SudParis)** 2022 - 2023
- Served as **Project Lead** for the design of an autonomous vehicle within the school's **Intech' Robotics Club**.
 - Managed a small team and implemented the vehicle's control system using **ROS 1**, **C++**, and **Python**.

EXTRACURRICULAR ACTIVITIES

- Project Manager - Autotech, Intech' Robotics Club (Télécom SudParis)** 2023 - 2024
- Led the continuation of the autonomous vehicle project, coordinating a small technical team and managing project direction.
- Treasurer - Welcom' International Students Association** 2023 - 2024
- Managed the association's budget and organized intercultural events fostering student integration at Télécom SudParis.

SKILLS

- | | |
|----------------------------------|--|
| Core | Python, Django, Odoo, ROS 1 & 2 |
| Machine Learning & AI | PyTorch, TensorFlow, Machine Learning Engineering, Statistical Modeling, Optimization Algorithms |
| Data & Systems | Data Analysis & Visualization, Database Design (PostgreSQL), Data Pipelines, Linux Environment |
| Software Development | API Development (REST, GraphQL), Software Architecture, Version Control (Git, GitHub), Bash, C++ |
| Web | Angular, HTML, CSS |

LANGUAGES

- | | |
|---------|-------------------|
| French | Native |
| English | C1/C2 (TOEIC 920) |