

# Pierre PHU

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## EDUCATION

### ISAE-Supaero

General Engineering curriculum

- Major: Data Science (Machine/Deep/Reinforcement learning)
- Minors: Space Systems and Autonomy, Planetology, Energy Transition
- Core courses: Applied Mathematics, Computer Science, Signal Processing, Space Mechanics, Automation

Sep. 2019 – Dec. 2023

Toulouse, France

### National University of Singapore – NUS

Exchange Program - Master's Level (M2) Lectures

- Modules: Neural Networks, Robot Perception, Fuzzy/Neural Systems for Intelligent Robotics
- Associative: Participation in climbing and dodgeball competitions

Jan. 2022 – May 2022

Singapore, Singapore

### Lycée Carnot

Higher school preparatory classes

- Core courses: Mathematics (Calculus, Algebra, Statistics), Physics (Mechanics, Thermodynamics, Electronics)
- Project: Study of the pressure drop in a pipe, optimise pipe pressure using genetic algorithms.

Sep. 2017 – Jul. 2019

Dijon, France

## EXPERIENCE

### Okomera

Data scientist intern - Deep learning

- Performed semantic segmentation of cancer cells images for Precision Cancer Medicine.
- Proposed and implemented annotation workflow and add pre-annotation pipeline using U-NET model.
- Improved the prediction score (DICE) by 40% while reduced the training cost by 30%.

May 2023 – Nov. 2023

Paris, France

### SharkGuard

Project leader - Deep learning

- Proposed an algorithm to detect sharks from aerial view using drones. [article link]
- Captured images and videos of sharks by drone, totaling 120 hours of flight, and created a licensed dataset.
- Manually annotated 1000 images and trained a Yolov5 algorithm for real-time inference.

May 2022 – Jul. 2022

Sydney, Australia

### Innov'ATM

Data scientist intern - Machine learning

- Predicted aircraft delays at departure of CDG Airport using machine learning algorithms.
- Performed Data processing, enhanced the dataset (with meteo) and trained multiple Random Forest models.
- Reduced prediction error by 50% (from 15 to 7 minutes) and integrated the pipeline to the company product.

Mar. 2021 – Jul. 2021

Cugnaux, France

## SKILLS

**OS:** Linux, Windows

**Programming Languages:** Python (Pytorch, TensorFlow, Keras, OpenCV, Pandas, Scikit-learn), Java, C, Matlab

**Database management:** MongoDB, PostgreSQL, AWS S3

**Softwares:** GitHub, Docker, OVHcloud, Apache Airflow

**Languages:** French (native), English (fluent C1), Spanish (professional B2/C1), Chinese (beginner A2)

**Soft Skills:** Curious, Autonomous, Rigorous

## EXTRACURRICULAR

**Surf:** Led a 50-member school surf club as President and reached the quarter-finals in the ASC contest.

**Alpinism:** Practice of cliff climb (V5/V6) and conquered high-altitude peaks including Tunguragua (5023m), Chimborazo (6263m), and Chachani (6057m).

**Handicraft:** Proficient in woodworking, surfboard shaping, and mechanical servicing, showcasing creativity, craftsmanship, and practical skills.