6 - 4695 Boulevard Édouard-Montpetit H3W 1R1 \square +1 (438) 488 8264 \square +33 6 95 25 40 80 \boxtimes mtnhugo062@gmail.com \bigcirc linkedin.com/in/hugo-mouton- \bigcirc UnMoutonPerdu

Hugo Mouton

Education

Now **M.Eng. in Computer Engineering**, Polytechnique Montréal, Montréal, Canada Sept 2023

- o Recruited on results through ISAE-SUPAERO
- O Double degree, master's in computer engineering
- O Recipient of the Fondation Georges Besse Excellence Scholarship since 2021

June 2023 M.Sc. in Aerospace Engineering, ISAE-Supaero, Toulouse, France Sept 2021

- Recruited through the Mines-Ponts competitive examination
- General engineering cycle, common scientific core in mathematics, physics, flight and materials mechanics

June 2021 **Preparatory Class**, Lycée Louis Le Grand, Paris, France Sept 2019

- MPSI then PSI* student
- Admitted to the preparatory class after passing the French science baccalaureate with distinction

Research Experiences

April 2023 **Research Internship**, École polytechnique computer laboratory (LIX), Palaiseau, July 2023 France

- Verification of neural network-based controllers
- Approximation and compression of ReLU-based neural networks
- Propagation of tropical polyhedra through a neural network
- Implementation of a library for modeling tropical polyhedra and study their propagation

Professional Experiences

July 2022 **Software Development Internship**, Boréal SAS, Toulouse, France August 2022

- Preparation of flight missions
- O Drone monitoring during flight
- Development of a flight data analysis tool
- Development of a graphical user interface for presenting results

March 2022 Computer center console team leader, ISAE-Supaero, Toulouse, France March 2023

- Service to computer center users
- Management of the console operator team, maintenance and training
- O Supervision of ISAE-SUPAERO's IT equipment in conjunction with teaching staff
- O Helping to set up lectures, practical courses and activities linked to the master's program

Honors & Awards

- Finalist in the Prologin 2022 competition
- o Finalist in the French Robotics Cup with the ISAE-Supaero team in 2022 and 2023

Activities

February ISAE-Supaero Sports Association — Internal Communications Manager,

2022 ISAE-Suapero, Toulouse, France

February 2023

- Maintaining relations between clubs and the association
- Search for partnerships for sporting events
- Automation of registrations and payments in conjunction with the association
- Website restructuring and maintenance (https://www.as-isae-supaero.com/)

May 2023

May 2022 President of the robotics club, ISAE-Suapero, Toulouse, France

- Find partners to finance the club
 - Team management
 - Formation of new club members in their respective poles

Skills

Programming languages

Python - C - C++ - Java - R - Scala - Prolog - OCaml - Matlab -HTML/CSS/JavaScript

Scientific skills

Problem solving - Machine Learning - Analytical skills - Data science

O Soft skills

Teamwork - Autonomy

Languages

- o French: Native
- o English: Fluent

TOEFL: 96/120 (Reading:26, Listening:25, Speaking:20, Writing:24)

O Spanish: Academic level