

French student at Institut Polytechnique des Sciences Avancées, Paris, specializing in Mechatronics. Seeking a final-year internship in robotics in abroad. Available from May 2026.

EDUCATION

<div>INSTITUT POLYTECHNIQUE DES SCIENCES AVANCES, AERONAUTIC &amp; SPACE SCHOOL</div> <div>Master of Science, Aeronautical engineering</div> <div>Major in Autonomous Aeronautical system</div>	<div>Paris, France</div> <div>Sep 2021 - Currently</div>
<div>DONGGUK UNIVERSITY, EXCHANGE SEMESTER</div> <div>Specialization in Data Analysis and Business Negociation</div>	<div>Seoul, South Korea</div> <div>Aug 2024 - Dec 2024</div>
<div>Intitut Emmanuel d'Alzon</div> <div>Vocational Diploma in Aeronautical Engineering (BTS, equivalent to an Associate Degree)</div> <div>With honours</div>	<div>Nimes, France</div> <div>Sep 2019 - Jul 2021</div>

EXPERIENCES

<div>NEXTEAM OLEMPs MACHINING</div> <div>Automatition Technicien Intern</div> <div><div><div>Designed and analyzed electrical and pneumatic diagrams for industrial systems</div><div>Developed and debugged LADDER logic programs (PLC programming)</div><div>Planned, implemented, and tested automated systems</div><div>Prepared and documented technical information and manuals</div></div></div>	<div>Olemps, France</div> <div>Jun 2025 - Sep 2025</div>
<div>ACTI GROUP - ALMERAS</div> <div>Aeronautical Technical Documentation Intern</div> <div><div><div>Assisted in the design and implementation of automated industrial systems</div><div>Programmed and tested PLCs using LADDER logic</div><div>Supported maintenance and troubleshooting of electrical and pneumatic circuits</div><div>Created and updated technical documentation and user manuals</div></div></div>	<div>Rodez, France</div> <div>Jun 2021</div>
<div>ACTI GROUP - ALMERAS</div> <div>BTS Mechanical Engineering Intern</div> <div><div><div>Gained hands-on experience in machining processes and dimensional inspection of precision parts for the aeronautics and space sectors.</div><div>Assisted in the verification of tolerances and quality control processes.</div><div>Optimized workstation layout by reorganizing tools and equipment, improving workflow efficiency and reducing unnecessary movements.</div><div>Contributed to the preparation of machining and inspection reports.</div></div></div>	<div>Rodez, France</div> <div>Jun 2020</div>
<div>SOLEÍ</div> <div>Workshop Laborer</div> <div><div><div>Assisted in the manufacturing of windows, verandas, and entrance doors.</div><div>Handled material movement and workshop logistics.</div></div></div>	<div>Rodez, France</div> <div>Jul 2023</div>
<div>MARIUS BONAL</div> <div>Production Assistant</div> <div><div><div>Produced and labeled syrup for packaging.</div><div>Ensured product quality and labeling accuracy.</div></div></div>	<div>Rodez, France</div> <div>Jul 2022</div>

# PROJECTS

## Autonomous robot of exploration

Development of an **autonomous exploration robot** for **unknown environments** using ROS2. We use the **frontier method** and the **A\* algorithm** to optimize path planning.

- Adapted and extended existing codebase to implement custom algorithms and parameters.
- Tuned robot behavior and exploration strategy to improve efficiency in unknown environments.
- Collaborated with team members to integrate modules and test system performance.

## Bi-RRT path planning

Development of a **bidirectional Rapidly-exploring Random Tree** (Bi-RRT) algorithm to **efficiently find a path** between two target points.

- Designed data structures and logic to support bidirectional search efficiently.
- Analyzed algorithm performance and identified bottlenecks for optimization.
- Documented methodology and results for reproducibility and team use.

## Handwritten Digit Classification (MNIST)

Development of a **convolutional neural network** (CNN) to **classify handwritten digits**, including **data preprocessing, model training, and evaluation**.

- Learned and applied core concepts of machine learning and deep learning.
- Implemented classification techniques and performance metrics to assess model accuracy.
- Gained hands-on experience in data preprocessing, model evaluation, and algorithm tuning.

# SKILLS

- Python programming
- Mechatronics and control systems fundamentals
- Autonomous robotics & path planning (A\*, frontier, Bi-RRT)
- Machine Learning & Deep Learning fundamentals
- Data preprocessing and algorithm tuning
- Simulation, debugging, and software adaptation
  
- Problem-solving and analytical thinking
- Team collaboration and communication
- Rapid adaptation to existing codebases
- Attention to detail and quality control
- Hands-on practical experience in lab/workshop environments
- Technical documentation and reporting

# LANGUAGES

- French *Fluent*
- English *Advanced-level (TOIEC - 895 pts)*

# HOBBIES

- |   |             |
|---|-------------|
| • <b>President</b> of the climbing association at IPSA - <i>IPSA GRIMPE</i> | 2023 - 2024 |
| • <b>Treasurer</b> of the climbing association at IPSA - <i>IPSA GRIMPE</i> | 2022 - 2023 |
| • <b>Climbing</b> (6c+/7a, V5/V6)   |             |
| • <b>Ski</b>  |             |
| • <b>Running</b> (10K, half-marathon, marathon)                             |             |
| • <b>Reading</b>  |             |
| Find your Why - <i>Simon Sinek</i>  |             |
| Start with Why - <i>Simon Sinek</i>   |             |
| 12 Rules for Life - <i>Jordan Peterson</i>                                  |             |
| The Mortal Instruments - <i>Cassandra Clare</i>                             |             |
| Percy Jackson - <i>Rick Riordan</i>   |             |
| One Piece - <i>Eiichirō Oda</i>   |             |