

# Lourenço Gouveia Faria

AEROSPACE ENGINEERING STUDENT

Toulouse (Occitanie), France

Upon request | lourencogfaria@gmail.com | lourenco-gouveia-faria

## Education

### ISAE-SUPAERO

M.S. IN AEROSPACE ENGINEERING (IN PROGRESS)

Toulouse, France

Sep. 2024 - Present

### Instituto Superior Técnico

B.S. IN AEROSPACE ENGINEERING

• Grade: 16/20

Lisbon, Portugal

Oct. 2021 - Jul. 2024

## Skills

**Programming:** C, C++, Python

**CAD:** SolidWorks

**Additional software:** MATLAB/Simulink, Mathematica, Git/GitHub, Docker, LaTeX (OverLeaf), Microsoft Excel

**Languages:** Portuguese (native), English (C2 Proficiency - Cambridge Assessment English), French (A2)

## Projects

### SupaeroMoon </>

COMMUNICATIONS AND GROUND SEGMENT GROUP COLLABORATOR

• Reviewed and documented team software for reliability and clarity

Toulouse, France

Nov. 2024 - Present

### Acrobat 🏠

INSTITUTE FOR SYSTEMS AND ROBOTICS RESEARCH STUDENT

- Designed a 3DoF dynamic model
- Developed a model predictive controller for a Free-flyer for In-Orbit Additive Manufacturing
- Optimized PWM implementation through in-depth propeller behavior analysis

Lisbon, Portugal

Jan. 2024 - Jun. 2024

### Rocket Experiment Division 🚀

NAVIGATION COORDINATOR & CONTROL TEAM COLLABORATOR

- Competed in EuRoC, Europe's largest rocketry event
- Designed rocket navigation systems using Kalman filtering.
- Developed a secure flight stage detection system

Lisbon, Portugal

Apr. 2022 - Jul. 2024

### Astro Pi - Mission Space Lab 🌌

TEAM LEADER

- Mapped global magnetic field intensity
- Collected and analyzed Earth's magnetic field data from the ISS

Ponta Delgada, Azores, Portugal

Oct. 2020 - Jun. 2021

## Work Experience

### NAV Portugal 'A'

ESTAGIAR-U PROGRAMME - SUMMER OCCUPATION

- Assisted ATSEP teams in maintaining CNS/ATM and energy systems
- Assessed meteorological simulation system for compliance and optimization

Relva, Azores, Portugal

Aug. 2024

### Observatório Astronómico de Santana, Açores ★

OTLJ PROGRAMME - SUMMER OCCUPATION

- Handled reception, telescope operations, and inventory management

Santana, Azores, Portugal

Aug. 2020 & Aug. 2019

## Honors & Awards

Jun. 2024

**Best prototype & Honourable poster (Acrobat),** EletroCap

Técnico Inovation Center, Portugal

Oct. 2023

**Payload award & 2nd Overall (RED),** EuRoC

Santa Margarida Military Camp, Portugal

Oct. 2022

**S3 flight award & 2nd Overall (RED),** EuRoC

Santa Margarida Military Camp, Portugal

Jul. 2021

**Winning Team (Mag-AZ),** Astro Pi - Mission Space Lab

Escola Secundária Domingos Rebelo, Portugal

Portfolio available at: <https://louxonline.github.io/>