

# JOÃO PEDRO SOUSA GASPAR

Aerospace Engineering graduate from Instituto Superior Técnico, with a dual background in Electronics Engineering and a specialization in Aerodynamics and Propulsion. Passionate about computational fluid dynamics, reusable technology, and the future of sustainable world. Hardworking and dedicated, I bring hands-on experience combined with a strong motivation to keep learning and contribute meaningfully to cutting-edge engineering challenges.



## Education

### Master's degree in Aerospace Engineering

Sep 2022 – Jun 2025

*Instituto Superior Técnico*

- Aerodynamics and Propulsion specialization
- **Key subjects:** Incompressible and Compressible Aerodynamics, Helicopters, Computational Fluid Dynamics, Aircraft Optimization, Electric Propulsion for Aircraft, Project Management
- **Thesis Subject:** *Computational Investigation of Spacecraft Recovery via Rotary Wings: A Study on Autorotation*

### Bachelor's degree in Electronics Engineering

Sep 2019 – Jun 2022

*Instituto Superior Técnico*

- **Key subjects:** Digital Systems, Communications Systems, Embedded Systems, Instrumentation and Signal Acquisition, Micro and Nanoelectronics, Computer Networks, Fundamentals of Automatic Control, Electronic Devices, Management

## Experience

### Self-Defense Instructor

Sep 2022 – Present

*Krav Maga Global*

- Planned and led self-defense classes for individuals and groups, ensuring safety and engagement.
- Provided personalized guidance to students, adapting techniques to different skill levels.
- **Developed Skills:** leadership, communication, teaching, adaptability, attention to safety

### Scholarship

Nov 2021 – Jan 2025

*ROB9-16 & Project "Oeiras Educa"*

- Led STEM workshops and activities for thousands of children under the ROB9-16 project at Instituto Superior Técnico.
- Collaborated with Câmara Municipal de Oeiras to develop educational programmes, lectures, and student projects.
- **Developed Skills:** work with children, public speaking, teaching, communication

### Técnico Fuel Cell

Jul 2022 – Apr 2024

*Electrical Engineer*

- Development of a telemetry system for a hydrogen powered car for Shell Eco-Marathon competition
- Responsible for the electronics and car assembly workshops, for car development, service and maintenance
- **Developed Skills:** electronics, PCB design, circuits and systems design, laboratory work, management

## Volunteering

### Mentor

Sep 2020 – Jul 2022

*NAPE - IST*

- Welcome and integrate new students to the school

### Project "Salas de Estudo Online"

Sep 2021 – Jan 2022

*Núcleo de Desenvolvimento Académico - IST*

- Providing personalized classes for the first years students helping with projects and examinations

## Certifications

**KMG Civil Instructor Course (190h)** - 2023

**Advanced Certificate in English** - 2019

**First Certificate in English** - 2018

## Hard Skills

**Programming Languages:** Matlab, Python, C

**Software:** Microsoft Office, Simulink, LabView, Solidworks, STARCCM+

**Driving license for category B**

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