Lucas Vieira dos Santos

Aerospace Engineer | MSc. in Control & Simulation

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Fuelled by a passion for aviation and software development, I graduated with a Master's degree in Aerospace Engineering, specialising in Control and Simulation. My hands-on experience includes building software for drones and using artificial intelligence to create safer autopilots. I'm eager to apply my skills and creativity to innovative projects, collaborating with a team to develop solutions that shape the future of technology.

Education

TU Delft

Sep. 2021 - Jul. 2023

Delft, NL

GPA 8.0/10.0

MSc. Aerospace Control & Simulation

- Thesis: Developed a machine learning-based autopilot, utilising Python and Pytorch, capable of adapting to unexpected scenarios and failures for enhanced aircraft safety. Received a grade of 8.5
- Relevant coursework: Automatic Flight Control Systems, Intelligent Control Systems and System Identification

TU Delft

Sep. 2018 - Sep. 2021

Delft, NL

GPA 8.0/10.0

BSc. Aerospace Engineering

- Graduation project: Developed the spacecraft's attitude and determination control systems. Collaborated with a team of 10 students to design a space mission, serving as the project coordinator. Received a grade of 9.3 and placed second in the TU Delft Design/Synthesis symposium
- Minor in Computer Science: Acquired skills in software development and data analytics with Python and C++ through various projects. Concluded with a GPA of 8.4/10.0

Work Experiences

Avy

Apr. 2022 - Sep. 2022

Amsterdam, NL

Software & Controls Engineering Intern

- Designed and implemented an Automated Testing Framework to evaluate the software and hardware performance of Avy's drones. This work led to significant improvements in the efficiency and reliability of testing procedures.
- Contributed to the maintenance and enhancement of Avy's in-house software suite, including the optimisation of the autopilot system and the development of visualisation tools for flight data analysis.
- Demonstrated proficiency in software development using Python and C++, and effectively utilised project management tools such as Git and JIRA.

DARE

Sep. 2020 - Jul. 2021

Delft, NL

Recovery Simulations Engineer

- Designed a Wind Tunnel Simulator using Python, specifically tailored to analyse the aerodynamic effects associated with in-flight parachute deployment.
- Led a development team of two, formulating project goals, providing technical mentorship, and ensuring timely progress towards deliverables.

Skills

- Software development
- Simulations
- Web development
- Graphic Design

Technologies

- Python
- C++
- Matlab/Simulink
- Go
- HTML/CSS
- Javascript
- CATIA

Tools

- Git
- Latex
- Jira

Languages

- Portuguese (Native)
- English (Fluent)
- Dutch (Basic)

Hobbies

- Photography
- Crafts
- Boardgames

Socials

Portfolio: iamlucasvieira.github.io
Github: iamlucasvieira