

# THOMAS GIORDANO

## Aerospace/Space Engineering Graduate

24-years old T.I.M.E Double Degree Graduate in Space/Aerospace Engineering, determined, hard-worker. Interested in Space Sciences and Space Engineering, in particular Spacecraft Control, Theory of Vibration and Space Physics.



✉ thomas.giordano280400@gmail.com

☎ +32 491 434501

📍 Liège, Belgium

🌐 Thomas Giordano

### 🎓 EDUCATION

#### Master Thesis

📅 02/2024 - 09/2024

📍 Veoware  
Leuven (BE)

Variable Speed CMG steering algorithm development and validation under realistic conditions using Model-in-the-loop testing. Formulation and testing of improvements to the algorithm using Machine Learning techniques, in particular neural networks.

#### MSc. Space Engineering

📅 09/2022 - 10/2024

📍 Politecnico di Milano  
Milan (IT)

Projects achieved (non-exhaustive list):

- Attitude Determination and Control of a 3U cubesat: Simulink model including the environment (orbital mechanics, disturbance torques), spacecraft dynamics and kinematics, attitude sensors and determination algorithms, as well as control logic and actuators
- 1. Interplanetary transfer including Powered Gravity Assist
- 2. Orbit analysis and ground-track estimation of an Earth observation mission
- Planetary protection guidance solution aimed at reducing the risk of impact with the Earth
- Low-thrust, time-optimal solution for an Earth-Venus transfer
- PRISMA mission: uncertainty propagation, batch, and sequential (Unscented Kalman) filters design
- System identification of longitudinal dynamics of a multirotor UAV and robust optimisation of experiment design
- Design of an Interferometric SAR (InSAR) system operating in Low Earth Orbit to measure the Line-of-Sight and Along-Track components of terrain deformation.

#### MSc. Aerospace Engineering

📅 09/2021 - 06/2022

📍 ULiège, Liège (BE)

Specialisation: Space Engineering.

Several projects achieved (non-exhaustive list):

- Vibration modeling of a helicopter
- Attitude control of a spy-satellite with reaction wheels
- Design proposal to the AIAA for a Hybrid-Electric Short Take-Off and Landing (STOL) Air Taxi. Worked particularly on static and dynamic stability.

#### BSc. Engineering

📅 09/2018 - 06/2021

📍 ULiège, Liège (BE)

Specialisation: Mechanics and Physics.

### 📄 TECHNICAL SKILLS

#### Programming

Matlab, Simulink,  $\LaTeX$



C, Python



Git, GitLab



#### CAD & FE Analysis

Siemens NX



#### Word Processing

Word, PowerPoint



### 🚀 EXTRACURRICULAR

#### Conference Maker

In September 2021, I organised a conference for the fifth and sixth years of ordinary secondary school, mainly about the BSc. in Engineering at ULiège.

#### Private Teacher

Especially in Mathematics and Physics, to students of secondary ordinary school.

#### Event Organiser

Already at the age of 17, in Belgium, being responsible for my academic year, I co-organised up to 2000-people parties, as well as a Christmas market stand.

### LANGUAGES

French  
English  
Italian  
Spanish

Bilingual Proficiency  
Full Professional Proficiency  
Limited Working Proficiency  
Elementary Proficiency