



Tommaso Pantalani

Date of birth: 10/10/1998 | **Nationality:** Italian | **Email:** tommaso.pantalani@uniroma1.it |

Address: Piazzale Cardinal Consalvi N.9, 00196, Rome, Italy (Home)

● EDUCATION AND TRAINING

01/11/2024 – CURRENT Rome, Italy

PHD IN AERONAUTICAL AND SPACE ENGINEERING Sapienza University of Rome

01/09/2021 – 17/10/2024 Rome, Italy

MASTERS DEGREE IN SPACE AND ASTRONAUTICAL ENGINEERING Sapienza University of Rome

Final grade 103/110 | **Thesis** Design and Testing of a GNSS-aided Inertial Navigation System for Launch Vehicles

01/09/2017 – 25/05/2021 Rome, Italy

BACHELOR'S DEGREE IN AEROSPACE ENGINEERING Sapienza University of Rome

Final grade 99/110 | **Thesis** Multi-Objective Trajectory Optimization for Minimum ΔV

● WORK EXPERIENCE

01/10/2021 – CURRENT Rome, Italy

STUDENT RESEARCHER AT THE SAPIENZA SPACE SYSTEMS AND SPACE SURVEILLANCE LABORATORY (S5LAB) SAPIENZA UNIVERSITY OF ROME

Specialized in:

- Guidance and Navigation
- Electronics
- System Engineering
- Optimization

01/09/2024 – CURRENT Rome, Italy

SCIENCE TEACHER ST. STEPHENS SCHOOL ROME

Science Teacher for an "Introduction to Engineering" Course

- Arduino and Interfacing with Sensors
- Hardware-in-the-loop simulations
- Mechanical Computer Aided Design (CAD)
- Electronic Computer Aided Design (ECAD)

● PROJECTS

01/10/2021 – CURRENT

Sapienza - Italian Space Agency (ASI) Research Agreement

Participation in the Sapienza - Italian Space Agency (ASI) research agreement titled "NIBBIO: Hybrid navigation with low cost sensors and industrial/commercial class data bus".

Acquired Skills:

- Data Fusion
- Kalman Filtering
- INS/GNSS Fusion
- MEMS Sensors
- Sensor Noise Component Characterization

Roles:

- Models Group Lead (Oct. '21 – Mar. '23)
- Student Lead (Mar. '23 – Present)

ESA REXUS/BEXUS Programme - RETINA Mission

Participation in the RETINA (Real-time Experiment for Thermal management, Inertial Navigation and Attitude) mission selected for cycle 34/35 of ESA's REXUS/BEXUS programme

Acquired Skills:

- INS/GNSS Fusion
- Advanced GNSS Integration
- Hardware-in-the-loop simulations
- ECAD

Roles:

- System Engineer
- Attitude Mission Lead Engineer
- Electronics Engineer

● **DIGITAL SKILLS**

Microsoft Excel | Microsoft Word | Microsoft Powerpoint | Simulink | Python | Arduino | Matlab | CAD | ECAD

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
SPANISH	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user