



Nicola Marmo

Nationality: Italian | **Email address:** nicola.marmo@uniroma1.it

● WORK EXPERIENCE

2 OCT 2019 – 19 OCT 2020 Sagamihara (Kanagawa), Japan

RESEARCH ASSISTANT JAXA (JAPAN AEROSPACE EXPLORATION AGENCY)

Aerodynamic research in Kawakatsu laboratory for the next JAXA missions MMX and Destiny+. More in detail, ballistic capture assessment for the Phobos approaching phase (MMX) and spiraling phase design before Moon encounter (Destiny+).

28 OCT 2018 – 5 SEP 2019 Colleferro (RM), Italy

GNC (GUIDE, NAVIGATION & CONTROL) ENGINEER AVIO (ON BEHALF OF AIZOON)

GNC engineer for ESA's satellite launcher Vega and separation analyst of the evolved in development version Vega C.

20 NOV 2016 – 10 AUG 2018 Rome, Italy

MISSION ANALYST SAPIENZA - UNIVERSITY OF ROME

Responsible for the mission analysis and data filtering for LEDSAT mission. The mission consists in a 1U CubeSat that will be launched from ISS in 2019. The satellite is one of the eight winners of the ESA competition "Fly Your Satellite!", which offers participating Universities the opportunity to design, construct and launch a fully operative CubeSat.

● EDUCATION AND TRAINING

31 OCT 2020 – CURRENT Rome, Italy

PHD IN AERONAUTICAL AND SPACE ENGINEERING Sapienza University of Rome

Research topic: Robust optimization of interplanetary trajectories.

Address Rome, Italy

27 SEP 2015 – 24 MAY 2018 Rome, Italy

MASTER'S DEGREE IN SPACE & ASTRONAUTICAL ENGINEERING Sapienza University of Rome

Main subjects: Orbital mechanics and attitude dynamics, gas dynamics, control theory, space propulsion, space systems, space structures, electronics, interplanetary trajectories, spacecraft design, space medicine, space robotic systems, space guidance and navigation systems.

Thesis: *Optimization of low-thrust trajectory to Near-Earth asteroid with Earth gravity assist* (Polytechnic University of Turin).

Design of a sample-return mission by means of indirect methods implemented in Fortran. This mission was inspired by the NASA's Asteroid Redirect Mission.

Address Rome, Italy

15 APR 2018 – 19 APR 2018 Redu, Belgium

ESA SPACE DEBRIS TRAINING COURSE ESA Academy's Training & Learning Centre in ESEC

The course provided university students with an introduction to the concept of space debris, why it is necessary to address this problem, and how the mitigation policies set by ESA apply to missions.

Furthermore, participants learnt not only about the space debris environment and mitigation technologies, but also about how it impacts spacecraft operations, and potential future solutions.

Address Redu, Belgium

2 OCT 2011 – 20 OCT 2015 Rome, Italy

BACHELOR'S DEGREE IN MECHANICAL ENGINEERING Roma Tre University

Main subjects: Mathematical analysis, linear algebra, physics, chemistry, analytical mechanics, materials science, fluid mechanics, electrical engineering, structural engineering, applied mechanics, applied thermodynamics and fluid dynamics.

Thesis title: *Aeroacoustic analysis of two cylinders in air flow.*

Recording campaign of noise generated by air flow around two identical cylinders spatially separated in the streamwise direction. Extensive experimental data have been collected using different distances between the cylinders and stream velocities.

Address Rome, Italy

10 SEP 2006 – 3 JUL 2011 Rome, Italy

HIGH SCHOOL DIPLOMA L. S. S. Aristotele

Main subjects: Math, italian literature, physics, english, chemistry, history, philosophy, latin.

Address Rome, Italy

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	B2	C1
GERMAN	A2	A2	A2	A2	A2

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

● DIGITAL SKILLS

MATLAB SIMULINK | LateX Document preparation | AGI STK | Proficient in using Microsoft Office | FORTRAN | C++ | NASA DAS | ESA DRAMA

● ADDITIONAL INFORMATION

NETWORKS AND MEMBERSHIPS

Member of the Order of the Engineers of Rome Membership No. A37793

DRIVING LICENCE

Driving Licence: B

CERTIFICATIONS

Habilitation to exercise the Industrial Engineering Profession

EdS, 1° Sessione del 2018, Sez. A

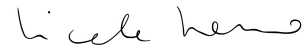
PERSONAL INTERESTS

Hobbys and interests

Classical music, piano, painting, math olympiad, chess.

I hereby declare that all the information contained in this resume is in accordance with facts or truths to my knowledge. I take full responsibility for the correctness of the said information.

Rome (Italy) , 4 Feb 2023



Nicola Marmo