

**PERSONAL INFORMATION SIMONE GIANNATTASIO**

PREFERRED JOB aerospace engineer

**WORK EXPERIENCE**

Jul 2022 - present

**IT engineer**

- GENERATION OF A HIGHLY-REALISTIC LRO LOLA DEM BASED 3D MOON VIRTUAL MODEL MEANT FOR TERRAIN-BASED VISUAL AND SENSOR FUSION NAVIGATION
- UNREAL ENGINE 5 LUNAR LANDER/ORBITER DIGITAL TWIN MISSION MODELING
- NEURAL TECHS FOR LUNAR LANDING TERRAIN BASED VISUAL NAVIGATION
- GENETIC ALGORITHMS FOR LUNAR NAV/TLC SAT CONSTELLATION OPTIMIZATION

Telespazio , Via Tiburtina, 965, 00156 Roma RM - ROMA (RM) Italy

*Business or sector* Engineering and design , aeronautics, aerospace, shipbuilding**EDUCATION AND TRAINING**

2022 - 2023

**Master in Satellite systems and services**

EQF level 8

Sapienza Università di Roma

2nd level Academic Master's programme

2017 - 2020

**Aerospace engineering**

EQF level 7

Politecnico di TORINO - Department of Mechanical and Aerospace Engineering

2nd cycle degree/Master of Science (2 years)

*Principal subjects/occupational skills covered:*

1) Main courses:

-Aeronautical structures -Aerospace systems -Gasdynamics -Mechanics of flight -Aeroelasticity - Numerical methods -Fluidodynamics of turbo machines / CFD - Engine construction and project - Aeronautical and Space propulsion

2) Structures Engineer for EolITO Engineering Student Team

3) Advanced Matlab and Simulink user

**Postgraduate studies****OTHER TRAINING COURSE**

2022 - 2022 (4 months)

System Engineering Workshop (II level Master)

Sapienza Università di Roma

Description: SAT INTEGRATED NAV/TLC LUNAR CONSTELLATION CONCEPTUAL PROJECT, DESIGN AND OPTIMIZATION THROUGH MATLAB/EXCEL CDF AND PRELIMINARY TLC/NAV AND POWER SUBSYSTEM DESIGN

**OTHER TRAINING COURSE**

2019 - 2020 (5 months)

DYNAMIC STRUCTURALIST AT EOLITO STUDENT TEAMWORK

Politecnico di TORINO

Description: WIND VERTICAL TURBINE MODAL AND RESPONSE ROTOR DYNAMIC ANALYSIS FOR EVALUATION OF ROTOR CRITICAL SPEED

**Pre-university studies**

School-leaving examination taken in (year): 2014

Italian secondary school diploma

**PERSONAL SKILLS**

Mother tongue(s) Italian

Foreign language(s)

English

UNDERSTANDING				SPEAKING				WRITING	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient	C1	Proficient	C1	Proficient	C1	Proficient	C1	Proficient

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user Common European Framework of Reference for Languages

### Linguistic experience(s)

#### Personal initiative

language study abroad programme in Edinburgh

Language: English

Duration of studies in months: 1

Foreign country where the academic studies were carried out: Edinburgh (United Kingdom)

Description: intensive english C1 course

#### Personal initiative

language study abroad programme in Dublin

Language: English

Duration of studies in months: 1

Foreign country where the academic studies were carried out: Dublin (Ireland)

Description: intensive english B2 course

### Communication skills

public speaker -skills acquired during Eolito Team presentation activities and internship experience in Telespazio

### Organisational / managerial skills

teamwork- competence acquired during:

-experience as a trainee in Telespazio during which I worked in the team of innovation and technology within a CDF

-Team experience during project work during second-level master's' Satellites and orbiting platforms' during which we simulated a CDF for the design of an attached space mission and satellite system

- EOLITO student team experience

### Digital competences

SELF-ASSESSMENT				
INFORMATION PROCESSING	COMMUNICATION	CONTENT CREATION	SAFETY	PROBLEM SOLVING
Proficient user	Proficient user	Proficient user	-	Proficient user

Digital competences - Self-assessment grid

#### Basic digital competence:

##### OFFICE AUTOMATION

**Office Suite:** Microsoft Office (Highly Specialised) | **Presentation Software:** (Highly Specialised) | **Spreadsheets:** (Advanced) | **Web Browser:** (Foundation) | **Word Processors:** (Advanced)

##### APPLICATION SOFTWARE

Unreal Engine (Advanced) | **CAD - Assisted Design:** CATIA (Highly Specialised) | **Structural calculation:** Patran/Nastran (Advanced) | **Space Mission Design:** STK (Highly Specialised)

##### COMPUTER PROGRAMMING

**Markup languages:** LaTeX (Advanced) | **Programming languages:** C++ (Foundation) , Fortran (Intermediate) , Matlab/ Simulink (Highly Specialised) , Python (Intermediate)

##### SYSTEMS AND NETWORKS MANAGEMENT

**Operating systems:** (Foundation)

##### GRAPHICS AND MULTIMEDIA

**3D graphics:** Blender (Advanced)