## EDUCATION AND TRAINING

2017 - 2020 - Rome, Italy

MASTER'S DEGREE IN SPACE AND ASTRONAUTICAL ENGINEERING - "Sapienza" University of Rome

Thesis Title: "Design of the solar sail boom structure for the HELIANTHUS project"

A comprehensive experimental and numerical study to investigate the advantage of cutting-hedge composite materials over standard ones in the flexure loading scenario. Three-point bending and platen folding tests, along with DMA Analysis, have been compared to multiscale material modeling simulation run with MSC Digimat software.

110/110 with honors

2014 - 2017 - Rome, Italy

BACHELOR'S DEGREE IN AEROSPACE ENGINEERING - "Sapienza" University of Rome

Thesis Title: "Definition of a flight dispatching system as a method of increasing safety in helicopter rescue operations" With reference to the guidelines provided by the International Civil Aviation Organization (ICAO), technical documentation was drawn up to define the duties of the Flight Dispatcher and the related procedures.

110/110 with honors

01/2020 - 01/2021 - Rome, Italy

FELLOWSHIP AT SDL (STRUCTURE DYNAMICS LAB) - "Sapienza" University of Rome

Experimental testing for aerospace structures and modal characterization.

02/2019 - 02/2020 - Rome, Italy

FELLOWSHIP AT SAS (SAPIENZA AEROSPACE STRUCTURES) LAB - "Sapienza" University of Rome

Experimental and numerical study of manufacturing processes, design, prototype and characterization of aerospace materials.

09/2019 - Orlando, United States

SCHOLARSHIP WINNER FOR IASP (INTERNATIONAL AIR AND SPACE PROGRAM) - AEXA aerospace

Program that involves teamwork, problem-solving and communication, among students and expert NASA engineers.

07/2018 - 08/2018 - Sevilla, Spain

SUMMER SCHOOL STUDENT - 19th CVA (Communaute des Villes Ariane) Summer School

Multidisciplinary Course on Space Transportation Systems.

09/2015 - 11/2016 - Rome, Italy

SAPIENZA SPACE TEAM (SST) MEMBER - Sapienza Aerospace Studen Association (SASA)

Team Member of the Mechanical Subsystem with a focus on payload integration ad deployment mechanisms.

06/2016 - Abilene, United States

**UNIVERSITY REPRESENTATIVE IN THE CANSAT COMPETITION - NASA** 

The competition consists in design, development and launching a space system.

## WORK EXPERIENCE

08/2019 - 11/2019 - Genève, Switzerland

**INTEGRATION ENGINEER - CERN** 

Installation Technical Planning Study for the Enfourneur, a machine for removal and insertion of ECAL (electromagnetic calorimeter) SuperModules for CMS (Compact Muon Solenoid) experiment. The relevant technical report has been published on EDMS (CERN's Engineering Data Management Service).

Contact person for the Enfourner technical installation plan.

01/2020 - 01/2021 - Rome, Italy

FELLOWSHIP AT SDL (STRUCTURE DYNAMIC LAB) - "SAPIENZA" UNIVERSITY OF ROME

Experimental testing of aerospace material and modal characterization of structure through vibrational analysis.

01/2019 - 02/2020 - Rome, Italy

FELLOWSHIP AT SAS (SAPIENZA AEROSPACE STRUCTURE) LAB - "SAPIENZA" UNIVERSITY OF ROME

Experimental and numerical study of manufacture, design, prototype and characterization of aerospace materials.

09/2017 – 12/2017 – Viterbo, Italy

**SAFETY ENGINEER - ELITALIANA S.P.A.** 

Assistance to the company's Quality Manager in adapting the figure of the Flight Dispatcher to the needs of the helirescue operator and in formalising company practices into procedures to increase the safety of operations.

## LANGUAGE SKILLS

Mother tongue(s): ITALIAN

Other language(s):

|         | UNDERSTANDING |         | SPEAKING          |                    | WRITING |
|---------|---------------|---------|-------------------|--------------------|---------|
|         | Listening     | Reading | Spoken production | Spoken interaction |         |
| ENGLISH | B2            | C1      | B2                | B2                 | B2      |
| FRENCH  | A2            | A2      | A2                | A2                 | A2      |

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

#### DIGITAL SKILLS

## Information processing and content communication

Microsoft Office | Google Drive | Latex Software

**Programming skills** 

MATLAB&Simulink

**CAD design and FEM analysis** 

Abaqus (FEM) | Patran/Nastran | CATIA V5/V6 | Apex | Solid Works Solid Edge AutoCad | Digimat | Msc Adams

Testing data acquisition and analysis

LMS TestLab | TrapeziumX Software | STARe Software

# COMMUNICATION AND INTERPERSONAL SKILLS

Flexibility and Adaptability in new environments

**Teamworking** 

| Clear Presentation and Crisp Writing |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
|                                      |  |  |  |  |  |
| Curiosity and Proactivity            |  |  |  |  |  |

# DRIVING LICENCE

**Driving Licence:** B