

PERSONAL INFORMATION **Giacomo Passarani**

**JOB APPLIED FOR** Incarico di lavoro autonomo avente ad oggetto Studio e caratterizzazione di materiali avanzati per applicazioni nei sistemi propulsivi spaziali, a favore del Dipartimento di Ingegneria meccanica e aerospaziale dell'Università degli Studi di Roma "Sapienza"

**WORK EXPERIENCE**

Nov 2023 – Mar 2024 **Paid Scholarship**

Faculty of Civil and Industrial Engineering, Sapienza, University of Rome, Italy  
Tutoring activities in the subjects of Mathematical Analysis and Geometry

23 Oct 2023 – 17 Nov 2023 **Internship**

Italian Navy, Mediterranean sea  
Space cell member - Participation in the NATO military exercise "Mare Aperto 2023-2" on board of the Italian Military Aircraft Carrier "Cavour" as Aerospace Engineer  
**Sector** Military exercise

Nov 2022 – Mar 2023 **Paid Scholarship**

Faculty of Civil and Industrial Engineering, Sapienza, University of Rome, Italy  
Tutoring for the information/accommodation service

**EDUCATION AND TRAINING**

Nov 2024–ongoing **PhD student**

EQF 8

Department of Mechanical and Aerospace Engineering, Sapienza, University of Rome, Italy  
– Study of multiphase flow effects on Solid Rocket Nozzle performance  
– Liquid Rocket Engines combustion chambers CFD simulations  
– Solid Rocket Nozzle mechanical erosion

Oct 2021–Jul 2024 **Master of Science in Space and Astronautical Engineering**

EQF 7

Sapienza, University of Rome, Italy  
Thesis: "Study of the effects of grain steps in hybrid rocket engines via CFD simulations"  
Final Grade: 110/110 cum Laude  
– Computational Fluid Dynamics  
– Space Propulsion  
– Spaceflight Mechanics  
– Space Structures  
– Space Missions and Systems

Oct 2018–Jul 2021 **Bachelor of Science in Aerospace Engineering**

EQF 6

Sapienza, University of Rome, Italy  
Thesis: "Hydrogen propulsion for aviation: general framework and combustion chambers"  
Final Grade: 110/110 cum Laude  
Path of excellence successfully completed

PERSONAL SKILLS

Mother tongue Italian

Other languages

|         | UNDERSTANDING |         | SPEAKING           |                   | WRITING |
|---------|---------------|---------|--------------------|-------------------|---------|
|         | Listening     | Reading | Spoken interaction | Spoken production |         |
| English | C1            | C1      | B2                 | B2                | C1      |

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](#)

Communication skills I have excellent team-working skills, acquired during the space propulsion laboratory course in the final year of my bachelor’s degree. I have also played in futsal teams as goalkeeper for more than 8 years.

Organisational / managerial skills I possess good leadership, gained throughout my university years.

Digital competences

| SELF-ASSESSMENT        |                 |                  |                  |                 |
|------------------------|-----------------|------------------|------------------|-----------------|
| Information Processing | Communication   | Content creation | Safety           | Problem solving |
| Proficient user        | Proficient user | Independent user | Independent user | Proficient user |

[Digital competences - Self-assessment grid](#)

Computer skills – competent with most Microsoft Office programmes, MATLAB, Fortran, Tecplot, VS Code  
 – experience with Python, Linux (Ubuntu)

Other skills Good handwork skills

Driving licence B