



## Ludovica Cavalieri

**Nationality:** Italian **Date of birth:** 04/07/2000 **Gender:** Female

✉ **Email:** [ludovica.cavalieri@uniroma1.it](mailto:ludovica.cavalieri@uniroma1.it)

### EDUCATION AND TRAINING

---

#### Ph.D. Aeronautical and Space Engineering

*Sapienza Università di Roma* [ 2024 – Current ]

City: Rome | Country: Italy

#### M.Sc. Space and Astronautical Engineering

*Sapienza Università di Roma* [ 2022 – 2024 ]

City: Rome | Country: Italy | **Final grade:** 110/110 cum laude | **Thesis:** Vision-based Localization and Mapping for a Lunar Rover

Excellence Path: Investigation of Computer Vision algorithms for space robotic system Navigation;

2022 - 2023: Member of the Navigation Software division of Sapienza Technology Team;

2023 - 2024: Leader of the Navigation Software division of Sapienza Technology Team.

#### B.Sc. Aerospace Engineering

*Sapienza Università di Roma* [ 2019 – 2022 ]

City: Rome | Country: Italy | **Final grade:** 110/110 | **Thesis:** Terrain Classification for a Mars Rover Mission: Training a Deep Convolutional Neural Network

#### High School Diploma in Classical Studies

*Liceo Classico Statale Giulio Cesare* [ 2014 – 2019 ]

City: Rome | Country: Italy | **Final grade:** 100/100

2014-2019: AUREUS (Arte, tUtela, Restauro, Educazione all'USo dei beni culturali) Curriculum

2019: XXVII Philosophy Olympics Regionals

#### Exchange Student in the United States

*David W. Butler High School* [ 08/2017 – 06/2018 ]

City: Matthews | Country: United States

### WORK EXPERIENCE

---

#### Junior Research Fellowship

*Sapienza Università di Roma* [ 01/05/2024 – 30/09/2024 ]

City: Rome | Country: Italy

Analysis of Synthetic Optical Data with Artificial Intelligence and Computer Vision Algorithms.

### LANGUAGE SKILLS

---

**Mother tongue(s):** Italian

**Other language(s):** French

## English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

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

## DIGITAL SKILLS

---

### Programming Languages

MATLAB / Python / C++

### Software Frameworks

Simulink / ROS / GMAT

### Operating Systems

Mac OS / Linux / Windows

### Other

LaTeX / CAD (Solid Edge, Solid Works) / Blender / NVIDIA Isaac Sim / Gazebo / Microsoft Office (Microsoft Office Word, Microsoft Office Excel, Microsoft Office Power Point)

## HONOURS AND AWARDS

---

[ 2024 ] Sapienza Università di Roma

### Excellence Path in Space and Astronautical Engineering

---

*I authorize the processing of personal data in the Curriculum Vitae according to art. 13 D. Lgs. 196/2003 and art. 13 GDPR 679/16.*