



Stefano Magrini Alunno

EDUCATION AND TRAINING

[01/11/2025 – Current]

PhD

Università di Modena e Reggio-Emilia

City: Ferrara | **Country:** Italy | **Field(s) of study:** Natural sciences, mathematics and statistics: • *Mathematics* | **Level in EQF:** EQF level 8

Supervisor: Lorenzo Pareschi

Co-Supervisor: Giacomo di Marco

Skills Acquired

- Preparation of presentations and posters using LaTeX
- Numerical methods for kinetic equations

Conferences and Schools Attended / To Attend

- Particle Systems and PDEs XIII (December 1-5, 2025)
- DataHyKing Workshop (March 23-27, 2026)
- MFML Summer School (May 24-29, 2026)
- M&MKT Summer School (June 7-13, 2026)
- ICTP-INdAM-SLMath Summer Graduate School on Machine Learning (June 15-26, 2026)
- LEAN Conference (September 7-11, 2026)
- HJE & MFG Workshop (October 1-2, 2026)

[01/10/2022 – 22/01/2025]

Master's Degree

Università degli Studi di Roma "La Sapienza" <https://www.uniroma1.it/it/pagina-strutturale/home>

City: Rome | **Country:** Italy | **Field(s) of study:** Applied Mathematics | **Final grade:** 10/110 Cum laude | **Level in EQF:** EQF level 7 | **Number of credits:** 120 | **Thesis:** Exploring Authorial Identity through Data Mining Techniques (advisor: Gabriella Anna Puppo)

Curriculum aimed at Data Science with foundations in cryptography and computational mathematics.

Main courses followed:

Mathematical Statistics (lecturer: Gustavo Posta)

Stochastic Processes (lecturer: Lorenzo Taggi)

Combinatorics (lecturer: Claudia Malvenuto)

Mathematical Models for Neural Networks (lecturer: Elena Agliari)

Computational Mathematics (lecturer: Giuseppe Visconti)

Deep Learning and Applied Artificial Intelligence (lecturer: Emanuele Rodolà)

Other activities:

- University tutor

[24/09/2018 – 30/04/2022]

Bachelor's Degree

Università degli Studi di Roma "La Sapienza" <https://www.uniroma1.it/it/pagina-strutturale/home>

City: Rome | **Country:** Italy | **Field(s) of study:** Natural sciences, mathematics and statistics: • *Mathematics* | **Final grade:** 110/110 | **Level in EQF:** EQF level 6 | **Number of credits:** 180 | **Thesis:** Analisi automatica di disegni per attribuzione d'autore (advisor: Gabriella Anna Puppo)

Curriculum aimed at numerical methods and elements of probability.

Main courses taken:

Geometry 1 (lecturer: Andrea Sambusetti)

Algebra 1 (lecturer: Paolo Papi)

Numerical Approximation Methods (lecturer: Giuseppe Visconti)

Geometry 2 (lecturer: Andrea Sambusetti)

Mathematical Analysis 1 (teacher: Fabiana Leoni)

Probability 1 (lecturer: Gustavo Posta)

Complex Variable (lecturer: Kieran Gregory O'Grady)

Laboratory of Programming and Computation (lecturer: Maria Lopez Fernandez)

Rational Mechanics (lecturer: Emanuele Caglioti)

WORK EXPERIENCE

Sapienza Aerospace Students Association <https://www.sasa-aerospace.it>

City: Rome | **Country:** Italy | **Email address:** sasa-administration@uniroma1.it | **Name of unit or department:** Computer Vision Division | **Business or sector:** Professional, scientific and technical activities

[15/09/2024 – 15/08/2025]

Sapienza Flight Team

Role:

I was responsible for developing software capable of mapping the territory from photos taken at an altitude of 90m. Research and development activities were also carried out, trying to meet the hardware requirements imposed.

Activities performed:

Development of software capable of mapping a territory.

Creation of mathematical models (of machine learning, but also physical and optical)

Python programming

Report writing with LaTeX and Word.

Consulting in other departments that dealt with computer vision and autopilot software

Familiarity with Blender software, roboflow site and github.

Sapienza Aerospace Student Association <https://www.sasa-aerospace.it>

City: Rome | **Country:** Italy | **Email address:** sasa-administration@uniroma1.it | **Name of unit or department:** AirDrop Division | **Business or sector:** Professional, scientific and technical activities

Link <https://www.youtube.com/watch?v=hb13KonX5lo&t=1s>

[15/09/2023 – 15/08/2024]

Sapienza Flight Team

Role:

Initially a member of the computer vision department, then a member of the AirDrop department, and finally head of the AirDrop division.

Goals Achieved:

The department was responsible for designing a case (built with 3D printers) that could accommodate an 8 oz bottle, a parachute attachment of about 70cmx70cm, and a nano arduino connected to a 5V servo and powered by an 8.4V battery. The department, following numerous tests, was able to complete the work within the time allowed by the team leader by making an easy-to-use and safe prototype.

The team won the safety award of the SUAS 2024 international competition by placing 6th.

Activities performed:

- Organization and teamwork
- Creating mathematical models (of machine learning as well as physics and optics)
- C/C++, Fortran, Arduino and Python programming
- Organization of experiments plus collection and analysis of empirical data
- Report writing with LaTeX and Word
- Assistance in electronics department, computer vision and autopilot software
- Familiarity with Blender software, roboflow site and github.

La Sapienza <https://www.uniroma1.it>

City: Rome | **Country:** Italy

[31/08/2024 – 30/09/2024]

University Tutor

Preparation and exposure is in-person lectures. Use of blackboard, projector and slides for lecture delivery. Preparation, execution and correction of tests and exercises.

Topics covered: Algebra, Probability, Analysis and Geometry

Coordinator: prof. Andrea Sambusetti

SKILLS

Programming languages

Linux | R | Arduino | asmx86 | Python 3.10 | MATLAB 22b | ISO/IEC 14882:2011 (C++11) | Bash | ISO/IEC 9899:1999 (C99) | Fortran90 | Experience in GPU programming using CUDA C/C++.

Computer skills

GoogleDrive | Microsoft(Microsoft Word, Microsoft PowerPoint, Microsoft Access, Microsoft Excel) | Github (Base)

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING A2 **READING** B1 **WRITING** B1

SPOKEN PRODUCTION B1 **SPOKEN INTERACTION** B1

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

CONFERENCES AND SEMINARS

[15/06/2026 – 26/06/2026]

Summer Graduate School for Machine Learning Trieste

Speaker: Andrea Montanari, Basil Saeed, Cristinta Trombetti, Davide Ghio, Francesca Mignacco, Tatiana Toro

poster title: Adaptive Collocation via Stochastic Solvers in PINNs

Link: <https://indico.ictp.it/event/11148>

[08/06/2026 – 13/06/2026] **Summer School Methods and Models in Kinetic Theory** Pesaro, Italy

Speaker: François Golse, Cyril Impert, Mikaela Iacobelli, Qin Li, Nilanjana Datta, Alessia Nota, Lorenzo Pareschi.

poster title: Adaptive Collocation via Stochastic Solvers in PINNs

Link: <https://mat521.unime.it/~webmama/MMKT/enter.php>

[24/05/2026 – 29/05/2026] **Summer School Mathematical Foundations of Machine Learning** Trento

Speaker: Lénaïc Chizat, Nicolás García-Trillos, Guido Montúfar, Enrique Zuazua

Link: <https://sites.google.com/unitn.it/mfml-2026>

[23/03/2026 – 27/03/2026] **Workshop DataHyking** Ferrara

Auditor

Link: https://datahyking.eu/?page_id=928

[01/12/2025 – 05/12/2025] **Conference PSPDE XIII** Modena

Auditor

Link: <https://sites.google.com/view/pspdexiii>

[21/07/2019 – 24/07/2019] **Summer School Perugia 2019 – INdAM Scholars Meeting**

Department of Mathematics, University of Perugia

Summer school aimed at INdAM scholarship winners

HONOURS AND AWARDS

[31/05/2024] **Team competition Awarding institution:** SUAS competition

It reached the 6th position in the world scale.

The competition required the development of a UAV that would accomplish a series of tasks within constraints given by the competition.

Link: [https://docs.google.com/spreadsheets/d/e/](https://docs.google.com/spreadsheets/d/e/2PACX-1vSV0_wulZ_djNrAeuGUOWQXyDoUyD6lgD5H7W9tqT8LZu_uv6s0OiEsDP0lbRetUTWTqQ9S1RAdvAr/pubhtml?usp=embed_facebook)

[2PACX-1vSV0_wulZ_djNrAeuGUOWQXyDoUyD6lgD5H7W9tqT8LZu_uv6s0OiEsDP0lbRetUTWTqQ9S1RAdvAr/pubhtml?usp=embed_facebook](https://docs.google.com/spreadsheets/d/e/2PACX-1vSV0_wulZ_djNrAeuGUOWQXyDoUyD6lgD5H7W9tqT8LZu_uv6s0OiEsDP0lbRetUTWTqQ9S1RAdvAr/pubhtml?usp=embed_facebook)

[30/09/2018] **INDAM Scholarship Awarding institution:** Istituto Nazionale Di Alta Matematica "Francesco Severi"

He reached the third national ranking following a test.

The scholarship was then renewed annually on merit until its natural end, which is after the third award.

Link: <https://www.altamatematica.it/wp-content/uploads/2018/05/Graduatoria402018-1.pdf>

- [30/04/2018] **Math Olympiad team competition Awarding institution:** Progetto Olimpiadi di Matematica
Achieved 10th national team ranking.
D ranking - blinder 1
Link: http://olimpiadi.dm.unibo.it/wp-content/uploads/2021/06/GareASquadreDiMatematica_Cesenatico2018.pdf
- [30/04/2017] **Bocconi individual national competition Awarding institution:** Università Bocconi - Giochi Matematici
He reached 44-th individual national ranking.
Link: <https://giochimatematici.unibocconi.it/index.php/archivio-giochi/finale-nazionale-2017-classifica-l1/viewdocument/93>
- [30/09/2022] **Member of MENSA association Awarding institution:** MENSA Italia
Recognition came as a result of an IQ test that you can only pass if you have passed the Mensa threshold of the 98-percentile of the population.Arseclamation

NETWORKS AND MEMBERSHIPS

- [30/09/2022 – 30/09/2024] **MENSA Italia** Italy
Link: <https://www.mensa.it/>
- [01/09/2023 – 31/08/2025] **Sapienza Aerospace Student Association (SASA)** Rome
Student Association of the Department of Aerospace Engineering at La Sapienza.
Link: <https://www.sasa-aerospace.it/>
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I hereby authorize the processing of my personal data contained in my curriculum vitae in accordance with the General Data Protection Regulation (GDPR) (EU) 2016/679.

29/07/2026