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# Lorenzo Zaffina

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**Phone:** (+39) 328 931 2671

**Citizenship:** Italian

**GitHub:** <https://github.com/zaffo1>

## Education

### University of Pisa

Pisa, Italy

2022 – Present

Master's degree in Physics  
- Physics of Complex Systems curriculum

### University of Pisa

Pisa, Italy

2019 - 2022

Bachelor's degree in Physics  
Grade: 110/110 cum laude  
Thesis: *"Impiego di transmoni superconduttori per la rivelazione di assioni e materia oscura"*, available on [GitHub](#)

### Liceo Scientifico G. Galilei

Lamezia Terme, Italy

2013 – 2019

High School Diploma (scientific studies)  
Grade: 100/100 cum laude

## Languages

- Italian (mother tongue)
- English (fluent: Cambridge Certificate of Proficiency in English, CEFR C2)
- French (basic: DELF A2)
- German (basic, no certificate)

## Computer Skills

- Proficient in: Python (NumPy, Matplotlib, SciPy, Pandas, Keras, PyTorch),  $\LaTeX$ , Git, Microsoft Office
- Familiar with: MATLAB, Bash, C, Linux, Root, Arduino IDE
- Knowledge of machine learning algorithms and techniques
- ECDL Full Standard Certificate, including the modules:
  - Computer Essentials
  - Online Essentials
  - Word Processing
  - Spreadsheets
  - Presentation
  - Online Collaboration
  - IT Security - *Specialised Level*

## University Projects

- 2023 - "Computational Neuroscience" Course. Laboratory assignments available on [GitHub](#).

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2023 - "Social Network Analysis" Course. Final Project "Italian Chamber of Deputies through a Social Network Perspective" available on [GitHub](#).

2023 - "Computing Methods for Experimental Physics and Data Analysis" Course. Exam project: Brain Age Prediction using Neural Networks with a Multimodal Approach; available on [GitHub](#).

#### Work Experience

2020 - 2023 - Experience online teaching mathematics and physics to high school students.

#### Volunteer Work

2017, 2018, 2021 - Three years of experience in the team of volunteers of [Trame Festival](#), a cultural event taking place in my hometown, Lamezia Terme. I was part of the editorial staff for two years and wrote articles for the newspaper of the festival. An article I'm proud of can be found [here](#).

2017, 2018 - Participation in the project [#ioleggoperché](#), which aims to promote reading in schools, encouraging donations to local school libraries.

2016 - Participation, as an *Helper*, in the English Summer Camp "City Camp" organised by ACLE in my hometown.

#### Physics Schools

August 2022, Roscoff - Plas@Par Summer School 2022 - Discover plasmas: from the laboratory to the distant universe.

April 2022, Trento - Spring School Q@TN - Quantum Science and Technologies at Trento.

#### Other Experiences

2019 - Participation in the 15<sup>th</sup> edition of "International Masterclasses - Hands on Particle Physics", at Università della Calabria.

2018 - Participation in "Scuola di Orientamento Universitario", hosted by the University School for Advanced Studies IUSS Pavia.

2017, 2018 - Italian Physics Olympiad. In 2018 winner of the school phase and participation in the regional phase.

2012-2015, 2019 - Math Games of Università Bocconi. Participation in the local semifinal of "Campionati Internazionali di Giochi matematici"; in 2012 and 2015 participation in the Italian Final.

#### Personal Data

I hereby authorize the use of my personal data in accordance to the GDPR 679/16 - "European regulation on the protection of personal data".

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**Lorenzo Zaffina**

November 26, 2023