

# Nicolò Massari | Resume

A hitchhiker of the cosmos

## Links

[massarin.org](https://massarin.org)  
[github](#) | [linkedin](#)

## Contact

[nicolo.massari@lam.fr](mailto:nicolo.massari@lam.fr)  
Marseille, France

## Experience



Research Software Engineer - [Global Health Engineering, ETH Zürich](#)

Mar. 2025 - Nov. 2025

- \* Open and FAIR science development for research data publishing
- \* Developed audio transcription and speaker diarisation software for ETH's cluster
- \* Skills: Python, CI/CD, Git | [ghe\\_transcribe](#)
- \* Skills: R, Git | [fairenough](#)



Simulations Software Engineer - [ARIS - Nautilus Project](#)

Oct. 2024 - Nov. 2025

- \* Built an autonomous underwater vehicle for exploration of Saturn's icy moons
- \* Contributed to simulations, controls and CI/CD development
- \* Skills: Python, ROS 2, Gazebo, Git | [dave](#)



University Teaching Assistant - [ETH Zürich](#)

Sep. 2023 - Jan. 2025

- \* Conducted weekly university classes to 30+ students of Analysis I and II



Tour Guide - [Detours Zürich](#)

Aug. 2024 - Oct. 2024

- \* Developed public speaking and time management skills



Design Thinking Coach - [PBLabs, ETH Zürich](#)

Aug. 2023 - Oct. 2023

- \* Applied Design Thinking methodologies to problem-solving workshops

## Education



PhD Disentangling galaxy mass with gravitational lensing - [Marseille, France](#)

Dec. 2025 - Dec. 2028

- \* Thesis: Using strong and weak gravitational lensing data from Euclid to map the distribution of dark matter and baryonic matter in galaxies. Developing Bayesian hierarchical models to constrain the stellar-to-halo mass relation.
- \* Skills: Python, Git



MSc Computational Cosmology and Astrophysics - [Zurich, Switzerland](#)

Sep. 2022 - Jun. 2024

- \* Thesis: Implemented a novel 2D inference tool using physics informed Gaussian Processes and Monte Carlo Markov Chain. Developing a field level inference auto differentiable pipeline in JAX.
- \* Project: Simulated k-essence models of dark energy with different small sound speeds with the [gevelution](#) code
- \* Skills: Python, Slurm, Git, | [cosmogp](#)



BSc Physics - [Bristol, UK](#)

Sep. 2021 - Jun. 2022

- \* Erasmus+ grant for an exchange year in Bristol



BSc Physics - [Bologna, Italy](#)

Sep. 2019 - Jun. 2022

- \* Project: Developed a simulation of infectious disease spread on a grid following the SIR model
- \* Skills: C++, Bash, Git | [board\\_game](#)

## Languages

Italian C2 | English C1 | German A2

## Skills

Python | C++ | CI/CD | Git | Bash | ROS 2 | Gazebo