Nicolò Massari | Resume

A hitchicker of the cosmos

Links
massarin.org
github | linkedin

Contact
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

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, LaTeX | 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 | LaTeX