

Giacomo Aloisi

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EDUCATION

Doctoral student in Geophysics

ETH Zürich, Switzerland

FEBRUARY 2024 - CURRENT

Research group: [Seismology and Wave Physics](#).

Research topics: forward and adjoint modeling for wave propagation using various computational methods, inverse problems related to seismology (FWI, ambient noise FWI)

Supervised by [Prof. Dr. Andreas Fichtner](#).

Institutional website: [Giacomo Aloisi](#)

Master's Degree in Computational Science and Engineering

ETH Zürich, Switzerland

SEPTEMBER 2021 - DECEMBER 2023

Graduated with honors. GPA: 5.86 / 6.

Specialization Major: Computational Geophysics.

TA for the 2023 edition of the course "Solving PDEs in parallel on GPUs with Julia".

Bachelor's degree in Computer Science and Engineering

University of Bologna, Cesena, Italy

SEPTEMBER 2017 - MARCH 2021

Final mark: 110 cum laude / 110.

Weighted cumulative GPA: 29.33 / 30.

PERSONAL PROJECTS

SeismicWaves.jl

2022 - CURRENT

An open-source Julia library for wave simulations (forward and adjoint) using finite differences methods on multi-xPUs. Part of the [HMC Lab](#) project and collaborating with the [GPU4GEO](#) project.

Technologies: Julia, ParallelStencil.jl, ImplicitGlobalGrid.jl.

Competitive Programming Tutoring

2017 - 2022

Active member of the local competitive programming scene by holding introductory courses for high school students who want to compete at national and international level.

WORK EXPERIENCE

Jr. Data Scientist/Web Software Developer,

eResult, Cesena, Italy

MARCH - DECEMBER 2020

Internal and external projects regarding data science/ML.

Technologies: Python, TensorFlow + Keras + Pandas,

HTML, CSS, Javascript + JQuery.

Learn more: [OmniaPlace](#)

Research Intern, Huawei Technologies France

Research Center, Paris, France

SEPTEMBER - OCTOBER 2019

Study of memory allocation optimization for deep neural networks.

Technologies: Python, Tensorflow, Protobuf, MiniZinc.

Jr. Web Software Developer, Onit, Cesena, Italy

JANUARY - JUNE 2018

Development of a proprietary WMS using C# and Asp.Net.

Web development, some full stack skills and SQL.

Learn more: [On.Plant/WMS](#)

AWARDS AND ACHIEVEMENTS

NOVEMBER - DECEMBER 2018

ICPC Autumn Workshop in Moscow MIPT and SWERC Regional Contest Participant for ACM ICPC

I attended the workshop in MIPT university with the best teams from all over the world preparing for the ICPC Regionals.

Learn more: it-edu.com/en/about-workshops/fall-training-2018

Representing my university at SWERC 2018, Unibo, team *Blaise1*.

Ranking: 15th place over 89 teams participating.

Learn more: swerc.eu

SEPTEMBER 2016

OII bronze medalist

OIS finals silver medalist

25th in OII 2016 over 96 finalists.

2nd in OIS 2015/16 over 20 finalist teams.

Learn more: olimpiadi-informatica.it / oisquadre.it

SKILLS

Languages

Italian (mother tongue), English (TOEFL iBT C1 Advanced 109/120), German (A1), Korean (한국어) (enthusiast).

Sports and Arts

Table tennis player, singer and guitarist.