

Giuseppe Steduto

COMPUTER SCIENTIST AND ENGINEER

✉ giuseppe@steduto.it | 🏠 giuseppesteduto.me | 📧 giuseppe-steduto | 🌐 giuseppe-steduto

Education

B.S. in Computer Science and Engineering

Milan, Italy

POLITECNICO DI MILANO - GPA: 29.5/30

Sep 2020 - Mar 2024

- Main coursework: Database management, Networking, Operating systems, Algorithms and Data Structures
- Member of Google Developer Student Club, Milan Engineering Student Association
- Top 2% of my course

B.S. in Computer Engineering - Exchange

Chicago, USA

ILLINOIS INSTITUTE OF TECHNOLOGY - GPA: 4.0 / 4.0

Aug 2022 - Jan 2023

- Won the GlobalE3 scholarship to study for one semester in the USA, being amongst the best 5% of applicants
- Main coursework: Artificial Intelligence, Web Development
- Dean's List and Housing Merit Scholarship recipient

Experience

Software Engineer Intern

Geneva, Switzerland

CERN

Mar 2023 - Present

- Working on the full stack of REANA, a platform used by scientists all around the world to make their analysis reusable, reproducible and instantiable and run on remote containerised compute clouds
- Monitored and optimized a database with 50,000+ workflows speeding it up by 200%, researched and implemented UI/UX trends, improved the workflow caching system, developed several new features and utilities
- Tools and technologies used: Python, GoLang, Kubernetes & Docker
- Served as a tour guide for 50+ visits at the laboratory (antimatter factory, LHC & CMS experiment, ...) divulging science to hundreds of tourists

Undergraduate Researcher

Chicago, USA

ARMOUR R&D - ILLINOIS INSTITUTE OF TECHNOLOGY

Sep 2022 - Jan 2023

- Automated a computer vision tool for early detection of diabetic retinopathy starting from fluorescein angiography
- I optimized MATLAB code and using a creative approach I managed to speed up the existing tool by 500%

Full-stack Web Developer

Remote

GRUPEM

Dec 2020 - Nov 2022

- Designed and created a web app consisting of a user dashboard and a complex relational database, improving the user satisfaction by 300%
- Deployed the application on the cloud and made it easily scalable, while coordinating with an international team that was responsible for developing a mobile application
- Tools and technologies used: Laravel, PHP, MySQL for the backend, ReactJS for the frontend. Deployed on AWS

IT Team Leader

Milan, Italy

MILAN ENGINEERING STUDENT ASSOCIATION

Sep 2021 - Jul 2022

- Trained and directed an international team composed of 11 persons in building a website with Wordpress and custom PHP plugins to showcase the work of the association, enhancing our online presence

Research & Publications

PV2023 @ CERN - Adding value (to) and preserving Scientific & Technical data

Geneva, Switzerland

FACILITATING FUTURE OPEN DATA REUSE VIA CONTINUOUS INTEGRATION OF ACTIONABLE DATA ANALYSIS EXAMPLES

2-5 May 2023

- Built a system to conduct continuous behavioural testing of scientific workflows using a domain-specific-language, allowing to run actionable code examples in their original computing environments using the REANA platform in order to ensure the validity of data access patterns across time.
- DOI: 10.5281/zenodo.10263204

Honors & Awards

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| 2021 | Alfiere del Lavoro , by the President of the Italian Republic, as one of the best 25 students in Italy | Rome, Italy |
| 2022 | Nova 111 Student List , selected as the highest-potential student in Computer Science in the whole country | Milan, Italy |
| 2022 | 1st Place , HackHarvard, hackaton hosted by Harvard University, in the in the "Best use of MATLAB" category | Cambridge, USA |
| 2020 | Finalist , Cyberchallenge, Italy's top cybersecurity training program and competition | Milan, Italy |
| 2021 | 3rd Place , Reply 5G & Edge Computing Tech Clash, hackaton hosted by Reply | Milan, Italy |
| 2021 | Best Freshmen , by Politecnico di Milano, scholarship for being in the top 5% of my year | Milan, Italy |
| 2021 | Lead The Future mentee , a mentorship program for STEM student with acceptance rate below 20% | |
| 2019 | Scuola Normale Superiore Scholarship , to attend a 1-week intensive orientation course for 200 students | Naples, Italy |