

Experience

Sep 2025– **Postdoctoral Researcher**, *Università della Svizzera italiana*, Lugano (Switzerland)
Co-supervision and collaboration with BSc, MSc, PhD students on research projects covering computer science education, with a focus on introductory programming and artificial intelligence by creating language models.

Sep 2020–Aug 2025 **Graduate Teaching Assistant**, *Università della Svizzera italiana*, Lugano (Switzerland)
Teaching assistant for courses in the Informatics BSc and MSc degree programs.

- Programming Fundamentals 1 — Fall '21
Introduction to programming using sublanguages of Racket.
- Programming Fundamentals 2 — Spring '21, '22, '24
Object-oriented programming in modern Java. Co-author of the [course textbook](#), including assignments.
- Programming Styles — Fall '23, '24
Exploring functional programming and programming language concepts in Java, JavaScript, Python, and Haskell.
- Algorithms and DS, Programming Languages Concepts, Didactics of Informatics 1+2, Software Engineering
Five courses for high school teachers, with tailored teaching materials.

Sep 2022–May 2023 **Instructor**, *Scuola Universitaria Professionale della Svizzera italiana*, Locarno (Switzerland)
Co-taught a two-semester course on Didactics of Informatics for prospective high school teachers.

Education

Sep 2020–Aug 2025 **Ph.D. in Informatics**, *Università della Svizzera italiana (USI)*, Lugano (Switzerland)
Dissertation on teaching introductory programming in the domain of graphics [📄](#), advised by Prof. Matthias Hauswirth. Research interests: programming education, programming languages, software engineering. Co-supervisor of Bachelor and Master students for theses and internships in Computer Science Education. *Mar – Sep 2023*: research visit at *Aalto University*, Finland, advised by Juha Sorva.

Sep 2018–Jul 2020 **Double Master's Degree in Informatics**, *UniMiB and USI*, Milan and Lugano
Graduated with 110/110 cum laude, with a thesis on a qualitative study on mastery checks while learning to program (Computer Science Education).

Sep 2015–Jul 2018 **Bachelor's Degree in Informatics**, *University of Milano-Bicocca (UniMiB)*, Milan (Italy)
Graduated with 110/110 cum laude, with a thesis on an automatic approach to identify potential binge drinkers on Twitter (Machine Learning & NLP). Participated in an additional cybersecurity program at Politecnico di Milano, ranking second in both the local final competition and the national final (as a team).

Sep 2010–Jul 2015 **Technical High School**, *ITIS Paleocapa*, Bergamo (Italy)
Graduated with 100/100, with a thesis on an automated spelling correction system.
Sep 2014: Won a bronze medal at the national final of the Italian Olympiad in Informatics.

Research Software Development & Outreach

Oct 2021– **PyTamaro**

- Created and actively maintain PyTamaro [🐙](#): an open-source educational graphics library for learning programming on strong foundations in an engaging way. Downloaded [over 40 000 times](#).
- Developed the PyTamaro Web platform [🌐](#): a collaboration with teachers to design hundreds of interactive activities to teach programming. Students around the world have executed [over 700 000 programs](#).

Sep 2014–Aug 2022 **Olympiad in Informatics**

- Authored tasks for the International Informatics Olympiad in Teams (editions 2017 – 2022).
- Trained high school students on problem-solving and algorithms implementation in C++.
- Organized a yearly Olympiad-style online contest (editions 2014 – 2019).

Selected Research Publications

The full list is available online [🌐](#)

«Programming» '25 Two Approaches for Programming Education in the Domain of Graphics: An Experiment [📄](#)
SPLASH-E '23 Teaching Programming with Graphics: Pitfalls and a Solution [📄](#)
Koli Calling '21 Wrong Answers for Wrong Reasons: The Risks of Ad Hoc Instruments [📄](#) (Best Paper Runner-Up)
ITiCSE '21 A Curated Inventory of Programming Language Misconceptions [📄](#)

Natural Languages

Italian Native
English Proficient