

Elisabetta Fedele

efedele@ethz.ch | elisabettafedele.github.io

EDUCATION

ETH Zürich

Master in Computer Science

Sep. 2021 – present

Zürich, Switzerland

- Major in **Theoretical Computer Science** and Minor in **Machine Intelligence**
- **Relevant Courses:** Advanced Machine Learning, Algorithmic Game Theory, Algorithms Lab, Computational Intelligence Lab, Computer Graphics, Computer Vision, Generative Visual Models, Graph Theory, Machine Perception, NLP, Randomized Algorithms and Probabilistic Methods

Politecnico di Milano

Bachelor in Computer Systems Engineering

Sep. 2018 – June 2021

Milan, Italy

- **Final mark:** 110/110 cum laude
- **Awards:** Merit Based Scholarship 2020/2021, Best Freshmen Prize 2019, Scholarship for Sports Merit 2019

EXPERIENCE

Research Intern

EPFL

Jul. 2023 – Sep. 2023

Lausanne, Switzerland

- Summer internship in the group of Alessandro Chiesa working in the time/space tradeoff of sumcheck protocol

Teaching Assistant

ETH Zürich

Feb. 2023 – June 2023

Zürich, Switzerland

- In charge of writing the Lecture Notes for the Machine Perception course

Research Assistant

Research Collaboration with data-driven Genomic Computing group at Politecnico di Milano

Oct. 2020 – Mar. 2021

Milan, Italy

- Processing of data on SARS-CoV2 viral sequences mutations on nucleotides and amino acids levels (Python)

Teaching Assistant

Politecnico di Milano

Sept. 2020 – Jan. 2021

Milan, Italy

- Tutoring an undergraduate class of 250 students during the laboratory of *Fundamentals of Computer Science*

SELECTED PROJECTS

OpenMask3D: Open-Vocabulary 3D Instance Segmentation | *Python*

Mar. 2023 – Jun. 2023

- Semester project on Open-Vocabulary 3D Scene Understanding. We leveraged the capabilities of CLIP to expand the task of 3D instance segmentation to an Open-Vocabulary setting.

FABRIC: Personalizing Diffusion Models with Iterative Feedback | *Python*

Mar. 2023 – Jun. 2023

- Group project for the Generative Visual Model seminar. We modified the Attention block of the Latent Diffusion model UNets managing to integrate users' personal preferences in the process of image generation.

Project in Sentiment Analysis | *Python*

Jun. 2022 – Jul. 2022

- Research Project on sentiment analysis of tweets to analyze performance of BERTweet, LSTM on Word2Vec embeddings and FastText. Finetuning BERTweet we achieved an accuracy of 92.04% .

Project in 3D Human Pose and Shape Estimation from RGB Images | *Python*

Apr. 2022 – Jun. 2022

- Project on 3D pose estimation, implementation of a modified version of PARE in PyTorch, with a HR-NetV32 backbone. Our final model achieved an error of 57.5 PA-MPJPE.

LANGUAGES

Italian (Native), **English** (Fluent - 8 IELTS), **French** (A2), **German** (A2)

EXTRACURRICULAR ACTIVITIES

Sailing

Professional Optimist and 420 sailor

Jun. 2006 – Jul. 2019

Cagliari/Mandello del Lario, Italy

- Member of the **Italian Sailing Team** from 2012 to 2019
- Competed in 6 World Championships and in 4 European Championships

Sailing instructor

FIV (Italian Sailing Federation) Sailing Instructor Diploma - Level I

May 2022 - Present

Dongo, Lake Como Italy