

# Elisabetta Fedele

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## EDUCATION

### ETH Zürich

*Master in Computer Science*

- Major in **Theoretical Computer Science** and Minor in **Machine Intelligence**

Sep. 2021 – present

*Zürich, Switzerland*

### Politecnico di Milano

*Bachelor in Computer Systems Engineering*

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

Sep. 2018 – June 2021

*Milan, Italy*

## EXPERIENCE

### Research Intern

*EPFL*

- Summer internship in the group of Alessandro Chiesa with the Summer@EPFL program

Jul. 2023 – Sep. 2023

*Lausanne, Switzerland*

### Semester project

*Google Research Zürich*

- Semester project in 3D Scene Understanding supervised by Federico Tombari and Francis Engelmann

Feb. 2023 – June 2023

*Zürich, Switzerland*

### Teaching Assistant

*ETH Zürich*

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

Feb. 2023 – June 2023

*Zürich, Switzerland*

### Research Assistant

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

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

Oct. 2020 – Mar. 2021

*Milan, Italy*

### Teaching Assistant

*Politecnico di Milano*

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

Sept. 2020 – Jan. 2021

*Milan, Italy*

## SELECTED PROJECTS

### Project on Open-Vocabulary 3D Scene Understanding | *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.

### Project on Diffusion Models for Image Generation | *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*

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

Jun. 2006 – Jul. 2019

*Cagliari/Mandello del Lario, Italy*

### Sailing instructor

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

May 2022 - Present

*Dongo, Lake Como Italy*