



Sebastian Cavada

Computer Vision student & Digital Innovator


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About Me

Pragmatic and creative person with a passion for new technologies, specifically in the fields of artificial intelligence and computer vision. Dedicated to using my skills and knowledge to help address the pressing issue of climate change. Focused on using technology and creativity to find solutions and make a positive impact on the world.


Social Network


 LinkedIn Profile


 Github Profile Page

 Website

Languages

 Italian - C2 - mother tongue

 English - C1

 German - B2

Education

Bachelor in Computer Science

- 2023-2025 **Master in Computer Vision** MBZUAI - Abu Dhabi
Pursuing Master of Research in Computer Vision at MBZUAI, researching SLAM and 3D Gaussian splitting supervised by Prof. Ian Reid.
- 2022 **Erasmus - Cognitive Science** Universität Osnabrück
Studied Cognitive Science for 6 months at the University of Osnabrück, in Germany, focusing on **Machine Learning and Computer Vision**. Strengthen my German language and communication skills.
- 2019 – 2023 **Bachelor Computer Science** Free University Bolzano
Graduated with **108/110** in Computer Science from a trilingual university, proficient in English, German, and Italian. Thesis project supervised by Prof. Oswald Lanz.
- 2016 – 2019 **Maturità Italiana** ITT Marconi, Rovereto
Graduated with **97/100** in the technical school in Rovereto with a specialization in Computer studies
- 2017 – 2018 **Irish Leaving Certificate** CBS Mitchelstown, Mitchelstown
4th year abroad, learned English, and achieved the Irish Leaving Certificate graduating with **476/625**

Projects

- 2019 – now **Hackathons** Around the world
Participated in numerous hackathons across Europe, demonstrating strong collaborative and technical skills. Achieved a notable 50% win rate in competitions. In 2022 I led a team to win first prize in the "4D Buildings" challenge at HackZurich, Europe's largest hackathon.
- 2019 – now **iRefill** Valle di Fiemme
Developed and continually enhanced "iRefill," a long-term project focusing on environmental solutions in food packaging. Overcame numerous challenges through dedicated efforts and collaboration with the co-founder. Actively contribute to a related blog, sharing insights and discussions on environmental topics.
- 2021 - 2023 **Climathon Fiemme** Predazzo
Co-organized the inaugural Climathon in Fiemme Valley, collaborating with three other individuals passionate about climate action. Successfully attracted over 50 participants, resulting in 9 innovative ideas and business projects with significant local community impact over the years.

Awards

- March 2024 **Winner of the Pioneers4.0 Hackathon**, co-organized by the Ministry of Industry and Advanced Technology (MoIAT), EDGE Group, and LIPTON. Awarded a special internship at LIPTON. EDGE - UAE
- July 2023 **Winner of fully founded master of research scholarship** MBZUAI - UAE
- Sep. 2022 **Winner of Challenge "4D buildings" by Siemens** HackZurich
- August 2022 **Finalist for Italian ClimateLaunchpad** EIT Climate-KIC - Italy
- March 2022 **Finalist for Productflows challenge** Bendingspoons - Italy

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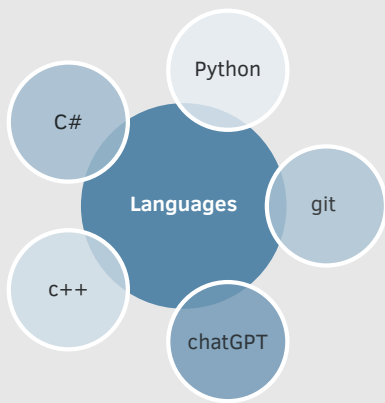
Interests

AWS Virtual Reality VueJS
Flutter MySQL Open Source
Computer Vision SLAM

Soft Skills

Creative ●●●●●
 Technologist ●●●●●
 Teamwork ●●●●●
 Problem Solving ●●●●●

PLs



Interests

Sport ██████████
 Music ██████████
 Photography and Video Editing ██████████
 Reading ██████████

Working Experience

2021 – 2022 **VR Developer** RealverseVR - a Start Up project
CTO and VR programmer at RealverseVR: Led development of educational experiences through VR technologies such as unity and meta quest, resulted in the publishing of a Virtual experience on Quest store and SteamVR, in collaboration with the museum of the Lagazuoi, Cortina.

2021 – 2023 **Student Tutor** University of Bolzano
Appointed for individual study support based on previous experience, personal characteristics, and expressed availability

2021 – 2023 **Junior Developer** Suggesto
Worked on web scraping, web application development using Flutter, and various testing and reporting tasks.

2018 – 2021 **Sales Staff** La sportiva, Ziano di Fiemme
Worked for three summers in sales at a leading mountaineering equipment company, improving sales and communication skills.

Internship

Summer 2024 **Mesh Reconstruction with LLMs** CVI2 - University of Luxembourg
Developed and implemented pipelines for dataset creation to instruct-tune Open-Source LLMs on 2D and 3D structured mesh auto-completion. Utilized PyTorch, Torchrun, HPC, and WandB for visualization. Overcame challenges in accelerating the training process to complete within two days. *Supervised by Dr. Anis Kacem.*

Summer 2023 **Implementation of AI task** FBK Trento
Developed and implemented **computer vision** AI task using an approach to scale **neural network** for low-resource systems. Created open-source code for portability across multiple platforms. Developed a pipeline from GPU development in Python to MCU deployment in C. *Supervised by Francesco Paissan.*

2022 – 2023 **Thesis Internship** UniBZ and NOI Techpark
Developed a real-time human 3D pose tracking system using ego-centric and exocentric video streams, which served as the basis for my thesis with that title. Also created a digital twin of the indoor environment, improving my expertise in data processing and visualization. *Supervised by Prof. Oswald Lanz*

2017 – 2017 **Junior Developer** Suggesto
Developed mesh network project, created content, tested infrastructure, and made improvements on the existing codebase.

2017 – 2017 **It-component repair** RepairMy, Dublin
Interned for 4 weeks at a technology repair store, specializing in laptops, phones, and desktops. Gained experience in hardware repairs, quality control, and shipping. Strengthened communication skills in English.

Extra-Curricular Activities

2023 **MBZUAI Entrepreneurship Courses**, hosted by StartAD to accelerate ideas development

2023 **Practice-oriented course on the EU's history**, structure, and politics at the University of Innsbruck EUREGIO Brussels School, including a visit to the European Parliament in Brussels.

2022 - now **Content creator on YouTube**, sharing tips and my experiences while traveling and programming

2021 **Entrepreneurship and Innovation Master course** as a free choice at the Free University of Bolzano

2020 - 2022 **Student representative** of the computer science faculty.