Matteo Zaramella

✉ mattezaramella@gmail.com   in Matteo Zaramella   🌐 My site
🐙 Matteozara

Work Experiences

Nov 2024 – Present	**Founder,** BrAIn, Padova, Italy. BrAIn is a company dedicated to transforming the museum experience by making it more interactive and innovative through cutting-edge technology and software development.
Jan 2025 – May 2025	**Founder in Residence,** Vento Venture, Turin, Italy. Selected among thousands of applicants to join the Vento Founder Cohort 2025, Exor's VC incubator, where 40 participants come together to build startups, in an environment full of mentoring, workshops, frameworks, and tools that will help the entrepreneur throughout the entire journey.
Mar 2024 – Oct 2024	**AI Junior Researcher,** Alcor Lab, Rome, Italy. I worked as a Junior Researcher in AI on a project aimed at collecting street images and predicting car accidents in real time. Specifically, I trained and fine-tuned computer vision models using various techniques to improve prediction accuracy. This project was developed in partnership with Vodafone.
Sep 2023 – Feb 2024	**Master Thesis Research,** Florida Atlantic University (FAU), Boca Raton, FL, USA. I was selected to work on my research master's thesis at FAU, focusing on crowd counting. I trained and fine-tuned several computer vision models for this task, applying various data augmentation techniques to improve performance due to the limited dataset available. My work specifically involved counting manatees, large animals under extinction in South Florida. This research led to a publication in the IEEE Open Access Journal.
Jan 2023 – Aug 2023	**Junior Researcher,** Sapienza University of Rome, Rome, Italy. I was studying and developing the application of generative models (like GANs and other deep learning architectures) in the deepfake space. My research aimed to make these models work on mobile applications for the cultural heritage field.
Sep 2022 – Feb 2023	**University Buddy for International students,** Sapienza University of Rome, Rome, Italy. I helped international students begin their time abroad by assisting them with class schedules, the study procedures at Sapienza, and, overall, making them feel at home in Rome by helping them make new friends and with orientation.
Sep 2018 – Dec 2022	**Waiter and Barman,** Spiller, Padova, Italy.
Jul 2020 – Oct 2020	**Software Engineer Intern,** Sapienza University of Rome, Rome, Italy. I developed software, backend (Golang) and frontend (Vue.js), for customers in a young startup for consultancy.

Education

2022 – 2024	**Master, Sapienza university of Rome** in Artificial Intelligence and Robotics. Grade: *110L/110*. Main subjects studied: Programming languages, Artificial Intelligence, Neural networks, Computer Vision, NLP, Robotics, Machine Learning and Deep Learning.
2017 – 2021	**Bachelor, Università dagli studi di Padova** in Computer Engineering. Main subjects studied: Programming languages, SQL, Databases, Math, Hardware, Software, Artificial Intelligence and Statistic.
2012 – 2017	**High school, ITC P.F. Calvi** in ICT and Economics.

Research Publications

Journal Articles

1. M. Zaramella, X. Zhu, and I. Amerini, "Enhancing manatee aggregation counting through augmentation and cross-domain learning," *IEEE Access*, vol. 12, pp. 131 148–131 163, 2024. 🔗 DOI: `10.1109/ACCESS.2024.3457800`.

Conference Proceedings

1. M. Zaramella, I. Amerini, and P. Russo, "Why don't you speak?: A smartphone application to engage museum visitors through deepfakes creation," in *Proceedings of the 5th Workshop on AnalySis, Understanding and ProMotion of HeritAge Contents*, ser. SUMAC '23, Ottawa ON, Canada: Association for Computing Machinery, 2023, pp. 29–37, ISBN: 9798400702792. 🔗 DOI: `10.1145/3607542.3617359`.

Skills

Languages	Fluent in English and native in Italian.
Coding	Python, PyTorch, Java, Golang, SQL, HTML, CSS, JavaScript, …
Technologies	Linux, Android Studio, Visual Studio Code, CUDA, Flutter, ONNX
Misc.	Computer Vision, Deep Learning, Artificial Intelligence, Machine Learning, NLP, Robotics, Math, Team Work, Research, Time Management, Engineer mindset, LaTeX.

Miscellaneous Experience

Awards and Achievements

2024	**Honors Master degree**, Sapienza University of Rome, Rome, Italy.
2023	**Best Paper Award**, SUMAC Workshop at ACM MM 2023, Ottawa, Canada.

Certification

Google Generative AI course, Google, Online.
I completed Google's online course on Generative AI, covering its evolution, practical applications, fine-tuning for custom tasks, and reducing hallucinations in both NLP and Computer Vision.

CyberChallenge IT, CyberSecurity, CyberChallenge IT, Italy.
The CyberSecurity course centered on theoretical and practical activities of attack and defense at the hardware and software level. I was among the 20 selected out of more than 500.