

Highly motivated MSc Computer Science student at the University of Milano-Bicocca with a strong passion for Artificial Intelligence, Machine Learning, and Computer Vision. Currently conducting thesis research at Stevens Institute of Technology, developing innovative methods for scenario generation. Eager to apply academic and research expertise to solve real-world problems and contribute to cutting-edge projects in a leading technology company.

Work Experience

University of Milano-Bicocca

Junior Researcher

Sep. 2024 – Dec. 2024

Milan, Italy

- » Reinforcement Learning - AI - Python - Problem Solving - Teamwork
- > Development of a dynamic profiling system based on reinforcement learning for route recommendation in the tourism sector.
- > Created a public service platform to make the profiling system easily accessible.

Education

University of Milano-Bicocca

Master's degree Computer Science, - Final grade: -/110

Sep. 2023 – Sep. 2025

Milan, Italy

» **Thesis title:** (Ongoing - Research conducted at Stevens Institute of Technology, Hoboken, New Jersey) University of Milano-Bicocca

University of Milano-Bicocca

Bachelor's degree Computer Science, - Final grade: 107/110

Sep. 2020 – July 2023

Milan, Italy

» **Thesis title:** "Automatic traffic analysis: machine learning approaches for the analysis of traffic flows on road networks"

Projects

Academical: FloodNet Image Segmentation

Jan. 2025 – Feb. 2025

- » Image Segmentation - Deep Learning - Python - Teamwork - Problem Solving - Creativity
- > Developed a semantic segmentation model (U-Net, SegNet, DeepLab) to identify flood areas in drone imagery post-Hurricane Harvey. Implemented data augmentation and fine-tuning techniques, achieving 85% pixel accuracy in flood detection, which aids in rapid disaster response.

Academical: Fine-Grained Food Classification

Dec. 2024 – Feb. 2025

- » Image Classification - Image Segmentation - Data Cleaning - Deep Learning - Python - Teamwork - Problem Solving - Creativity
- > Designed and evaluated a fine-grained food classification system using image data. The project involved model training, data augmentation, and classification of 251 food classes, including degraded images, with comprehensive performance analysis.

Academical: Self-Driving Car Simulation

Sep. 2024 – Feb. 2025

- » C# - Unity 3D - Reinforcement Learning - Curriculum Learning - Agents - Teamwork - Problem Solving
- > Developed a Unity-based self-driving car simulation using reinforcement learning to train a car agent to navigate complex environments. Employed curriculum learning to improve training efficiency and evaluated the agent's performance in various challenging scenarios.

Publications

Dynamic User Profiling for Personalized Tourism Recommendations Using Reinforcement Learning Models

April 2025

- > Ferrario, T., Fersini, E., Messina, E., Sormani, G. (2025). Dynamic User Profiling for Personalized Tourism Recommendations Using Reinforcement Learning Models. In: Barolli, L. (eds) Advanced Information Networking and Applications. AINA 2025. Lecture Notes on Data Engineering and Communications Technologies, vol 251. Springer, Cham. https://doi.org/10.1007/978-3-031-87781-0_21

Skills

Soft Skills Problem-Solving, Effective Communication, Adaptability, Teamwork, Creativity

Machine Learning Deep Learning (TensorFlow, PyTorch), Reinforcement Learning, Computer Vision (OpenCV, Image Processing), Natural Language Processing (NLP), Data Analysis

Databases Relational (SQL, MySQL), NoSQL (MongoDB, Firebase)

Tools & Technologies Git, Docker, REST, Algorithms, Data Structures, Android, Flutter

Programming Languages Python, Java, C#, C, Julia, Matlab, Dart, Go

Communication

Italian Mother tongue

English B2

I agree to the processing of personal data provided in this document for realizing the recruitment process according to the Personal Data Protection Act of 10 May 2018 (Journal of Laws 2018, item 1000) and in agreement with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons concerning the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)