Tommaso Ferrario *ITA*

MSc Student

📞 +39 348-258-1596
🏠 Casatenovo, Italy
TommasoFerrario18
My Portfolio
✉ tommasoferrario81@gmail.com
in Tommaso Ferrario

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   Sep. 2024 – Dec. 2024
Junior Researcher   *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 Milan-Bicocca   Sep. 2023 – Sep. 2025
Master's degree Computer Science, - Final grade: -/110   *Milan, Italy*
» **Thesis title**: (Ongoing - Research conducted at Stevens Institute of Technology, Hoboken, New Jersey)

University of Milan-Bicocca   Sep. 2020 – July 2023
Bachelor's degree Computer Science, - Final grade: 107/110   *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.

🎓 **Academical: Travel Pals**   Mar. 2025 – Jun. 2025
» Flutter - Dart - Mobile App - DevOps - Git - CI/CD - Teamwork - Problem Solving
› Travel Pals – Cross-platform app developed in a team using Flutter, Firebase, Trello, and GitLab to help users organize group trips and manage shared expenses. I contributed as both Product Owner and Software Developer.

⚗ 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*