Roberto **Di Via**
PhD's Student in Machine Learning and Vision

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Education

PhD in Machine Learning and Vision
Genoa, Italy

MaLGa (Machine Learning Genoa Center) - Snoots S.r.l
Nov. 2023 - Nov. 2026

- The project aims to study, develop, and validate computer vision and deep learning methods for veterinary medical image analysis.

MSc in Computer Science (Data Science & Engineering - Artificial Intelligence)
Genoa, Italy

Università degli Studi di Genova - Grade: 110 cum Laude/110 (GPA: 4.0 with honours)
Oct. 2021 - 04 Oct. 2023

- Mastered **Machine Learning** (SVM, clustering, neural networks) including **Deep Learning** advanced topics (CNN, RNN, GANs, geometric, and reinforcement learning).
- Developed **Computer Vision** expertise, covering motion analysis, object detection, instance/semantic segmentation, and **Digital Signal/Image processing** (Fourier series, Kalman filters, wavelets).
- Acquired skills in **Natural Language Processing** (POS tagging, topic modeling, text summarization, sentiment analysis) and **Speech Processing and Recognition** (short-time/homomorphic analysis, ASR, TTS).
- Proficient in **Data Visualization** (D3.js, design principles) and **Large-Scale Computing** (Hadoop, Spark, Map-Reduce, Docker).
- Explored **High-Performance Computing** (vectorization, OMP, MPI, CUDA) and **Multi-Agent Systems** (Jason, NetLogo, Jade).

BSc in Computer Science
Genoa, Italy

Università degli Studi di Genova - Grade: 95/110 (GPA: 3.75)
Oct. 2017 - Jun. 2021

- Object-oriented and functional imperative languages
- Concurrent and distributed programming
- Differential and integral calculus, probability, mathematical logic
- Operating systems and computer networks

Experience

Samsung Innovation Campus - Smart Things Edition
Genoa, Italy

Samsung Electronics Italia - Università degli Studi di Genova
Sept. 2023 - Dec. 2023

- The program is an innovative path developed by Samsung for training young talents in the technical-scientific field.
- Acquired essential skills in AI and IoT.
- Developed strong problem-solving capabilities and enhanced teamwork and public speaking skills.

Master's Thesis: "Computer vision methods for automatic volume calibration in MRI medical images"
Genoa, Italy

MaLGa (Machine Learning Genoa Center) - Esaote S.p.A - Camelot Biomedical Systems
Mar. 2023 - Oct. 2023

- Developed an innovative automated MRI volume calibration process exploring state-of-the-art methods.
- Honed my skills in deep learning techniques and architectures, focusing in image-related tasks.
- Gained experience in overcoming limited data challenges using transfer learning, boosting the performance by more than 250%
- Collaborating with medical companies provided valuable insights into applying advanced technology to real-world problems.

MEET AI – An Artificial Intelligence workshop for kids at Festival della Scienza
Genoa, Italy

Associazione Festival della Scienza
Oct. 2022 - Nov. 2022

- Led more than 30 participants through an interactive journey to discover artificial intelligence, providing them with an understanding of Machine Learning and Computer Vision.

Tutor for First-year College Students
Genoa, Italy

Università degli Studi di Genova
Jul. 2019 - Nov. 2020

- Helped more than 100 first-year students interface in college and supervised them in lab activities throughout the year.

Skills

Web Development	HTML, CSS, Bootstrap, JS, JQuery, Ajax, D3.js, PHP, MySQL, PostgreSQL
Programming Languages	Python, Pytorch, Tensorflow, Matlab, JAVA, C/C++, C#
Tools	Anaconda, Visual Studio, IntelliJ, Android Studio, Unity
Utilities	SSH, GitHub, LaTeX, Microsoft Office: Word, Excel, PowerPoint
Languages	Italian (native), English (professional)