

Davide Marincione

3 years experience in AI research | Top 1% of BSc and MSc computer science cohorts

LLMs, music generation, research featured at ICML

davide.marincione@gmail.com | [GitHub](#) | [LinkedIn](#)

Languages

Italian (Native)
English (C1)

Programming

Python, C, Go,
Rust, C++, Java,
SQL, JavaScript,
Dart, Kotlin,
RISCv

Tools &

Frameworks

VS Code,
PyTorch, git,
SLURM, WandB,
Docker, L^AT_EX,
Office, Blender,
Godot, Aseprite,
ScanTailor

Interests

Video Games
Books
Fossils
Gunpla
Trekking

Education

Ph.D in Computer Science

at Sapienza University of Rome

Supervisor: Prof. Emanuele Rodolà

2025 - Present

Rome, Italy

M.Sc. in Computer Science

at Sapienza University of Rome

110/110 *cum laude* | GPA: 30.5/31

2023 - 2025

Rome, Italy

B.Sc. in Applied Computer Science and AI

at Sapienza University of Rome

110/110 *cum laude* | GPA: 30.3/31

2020 - 2023

Rome, Italy

Experience

Research Intern

at VisionLab & PINLab & GLADIA, Sapienza University of Rome

- Opening research line on waveform loopable music generation. Improved hearing tests by **70%**.
- Improved SOTA by up to **50%** on pedestrian trajectory forecasting by expanding UniTs model.
- Improved SOTA of low parameter count (~ **3M**) models by **20%** on facial photo inpainting.

2022 - 2025

Rome, Italy

On-site IT support

at Department of CS' labs, Sapienza University of Rome

2024/04 - 2024/12

Rome, Italy

Internal study on students with "learning debts"

at Sapienza University of Rome

2023/12 - 2024/01

Rome, Italy

Honours

Tuition Reduction for Meritorious Students

by Sapienza University of Rome

- First place winner throughout both Bachelor's and Master's degrees.

2020 - 2025

Rome, Italy

Honours programme in Computer Science

by Sapienza University of Rome

- First place winner of the honours programme in Computer Science.

2022/02

Rome, Italy

Summer Schools

Bologna Orthogonal Summer School

by ELICSIR

2024/08

Bologna, Italy

Challenges in building Billion Users Cloud Applications

by Google

2023/09

Varenna, Italy

Publications

- [1] **Davide Marincione**, Michele Mancusi, Giorgio Strano, Luca Cerovaz, Donato Crisostomi, Roberto Ribuoli, and Emanuele Rodolà. "PHALAR: Phasors for Learned Musical Audio Representations". In: Proceedings of the Forty-Third International Conference on Machine Learning. 2026.
- [2] **Davide Marincione***, Giorgio Strano*, Donato Crisostomi, Roberto Ribuoli, and Emanuele Rodolà. "LoopGen: Training-Free Loopable Music Generation". In: Proceedings of the 26th International Society for Music Information Retrieval Conference. 2025.

WORKSHOP PAPERS

- [3] **Davide Marincione***, Donato Crisostomi, Roberto Dessi, Emanuele Rodolà, and Emanuele Rossi*. "Model Merging Enables In-Context Learning for Bioacoustics Foundation Models". In: The Thirty-Ninth Annual Conference on Neural Information Processing Systems workshop: AI for non-human animal communication. 2025.

Projects

Bark, the ludicrous attributed graph grammar for chess

2024

- Developed a graph grammar to play chess against... takes 2 hours to decide opening move.

Forecasting players' positions in shooter games via Markov chains

2022

- Designed a model to forecast future 5 seconds positions in CS:GO's `de_dust2` with 65% probability.