ALBERTO DI MARIA

Music and Acoustic Engineer

CONTACTS

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Alberto Di Maria

albedimaria

albedimaria.github.io

TECH SKILLS

Languages and Frameworks:

- **Python**
- **MATLAB**
- **C++**

Deep Learning:

- **TF / Keras / PyTorch**
- **Librosa / Essentia**

Generative Models:

- **VAEs / GANs**
- **Diffusion / Transformers**

Tools:

- **Git**
- **Docker**
- **AWS**

LANGUAGES

Italian - native

English - advanced

Spanish - intermediate

French - elementary

PROFILE

MSc graduate in Music and Acoustic Engineering, specialized in **deep learning applied to audio**.
Experienced in signal analysis, generative models, and interactive audio systems.
Interested in applied research and real-world innovation in sound and music technology.

EDUCATION

Electronical Engineering
Università di Padova - Padua, Italy

M.Sc. Music and Acoustic Engineering
[Computer Science and Engineering]
Politecnico di Milano - Milan, Italy

Further training

Creative Machine Learning – IRCAM / ACIDS

- Course on ML for audio: fundamentals, neural networks, generative models and transformers.
- 2025, online, 10 weeks, certificate awarded.

Generative Music AI Workshop – MTG & Sound of AI

- Workshop on GenAI for music creation with team-based project development.
- 2025, in person, 1 week, certificate awarded.

Audio Signal Processing for Music Applications – uPF

- Course on audio DSP tools for analysis, transformation, and synthesis of musical signals.
- 2025, online, 10 weeks, in progress.

WORKING EXPERIENCE

2023 - 2024
Audio Developer
Anecoica Studio - Berlin, Germany

- Worked on MIR, 3D UIs, and generative audio models. Built full-stack prototype using React.js, Flask, and Python.

2021 - current
Private Tutor
il-Cubo.it - Milan, Italy

- Tutored over 30 university students in computer science and electronics, strengthening technical expertise and clarity in explaining complex concepts.

PROJECTS

BEYOND SPACE: RAVE LATENT INTERPOLATION AUDIO SYSTEM - *github*
Tech*: Python, PyTorch, Librosa*
Format*: solo project*

Audio interpolation system using RAVE (VAE-based model), exploring latent manipulation for generative synthesis.

DEEP LEARNING FOR MUSIC GENRE CLASSIFICATION - *github*
Tech*: Python, TensorFlow, Keras*
Format*: solo project*

CNN and hybrid RNN (LSTM) for automatic genre recognition, optimized hyperparameters, F1-score, and confusion matrices.