# Giulio Zani

Google Scholar

GitHub

Personal Website

**Email** 

Superprof



Enthusiast in deep learning, adept with PyTorch, TensorFlow, and JAX, I bring extensive tutoring experience in AI/ML. Passionate about innovating smart solutions, I am eager to explore opportunities that challenge me to expand my skill set in AI engineering and research.

# **Selected Experiences**

#### LLMs as reliable recommender systems

Sep 2023 - Now

Online

Startup

Leading AI and prompt engineering in a startup focused on next-gen importance ranking.

(Fine-Tuning)

(LangChain)

#### Optimized ELBO in Graph **Diffusion Models**

Mar 2023 - Nov 1, 2023

UvA, Amsterdam

Master's Thesis in Al

Enhanced Evidence Lower BOund computation in graph diffusion models, applied to molecular datasets.

(Python)

(JAX)



#### AI/ML Tutor

Mar 2020 - Now

Superprof.com

Side-Job

Providing specialized tutoring in machine learning and programming to master's students.

PyTorch

Keras

Sklearn

Numpy

Pandas

## Translating untranslatable words

Sep 2023 - Oct 2023

Online

Side-Job

Study on how LLMs represent untranslatable words by fine-tuning multilingual models.

Fine-Tuning)

mBERT

#### Mate: Modular Deep Learning

Sep 2022 - Feb 2023

UvA, Amsterdam

Research Intern

Developed Mate, a framework for modular and reproducible deep learning projects.

Python

(PyTorch)

MLOps

### **GANs for Weather Nowcasting**

Jan 2022 - Jun 2022

Maastricht

Research Project

Adapted GANs for video prediction, focusing on weather nowcasting.

Python

PyTorch

#### Deep Learning for Epileptic Seizure Prediction

Mar 10, 2021 - Jun 3, 2021

Padova, Italy

Research Internship/Thesis

Developed deep learning models, including biLSTMs and ConvNets, for predicting epileptic seizures.

Python

PyTorch )

(EEG

#### Cortical Topographical Efficiency

Jan 20, 2020 - Mar 31, 2020

CIMeC, Trento, Italy

Research Internship

Investigated how cortical organization is influenced by anatomical and functional connectivity.

fMRI )

(DTI) (Python)

#### Soft Skills



#### Education

#### Master in Artificial Intelligence

August 2021 - October 2023 Maastricht University, Netherlands

#### Bachelor in Psychology

September 2018 - June 2021 University of Padua

# Courses in Physics and **Mathematics**

Minor in Computer Science

September 2016 - December 2017 University of Leipzig

September 2018 - June 2021

University of Padua

#### Technical High School in Computer Science

September 2011 - June 2016 Technical Institute Guglielmo Marconi

> "I am an Artificial Intelligence student, I turned to Giulio for a Deep Learning exam, he was a great help on both the theory and programming part, and I passed the exam with flying colors!!! Thank you very much again"

> > — Marianna (Superprof)

"Needing to take classes on programming, Artificial Intelligence, and Deep Learning, I found in Giulio a teacher ... Therefore, Giulio is the right person to turn to both for being introduced to programming and Artificial Intelligence and for dealing with more in-depth and specific topics."

- Martina (Superprof)