

# Giulio Zani



I am a deep learning enthusiastic, experienced with PyTorch, TensorFlow and JAX. I have years of tutoring in AI/ML and I love creating smart things! I'm looking for opportunities that require me to learn new skills, and involve 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.

GPT-4

mBERT

LangChain

### Optimized ELBO in Graph Diffusion Models

Mar 2023 - Nov 1, 2023

UvA, Amsterdam

Master's Thesis in AI

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

Python

JAX

TPU

### 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

JAX

PyTorch

Keras

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

GraphX

# Soft Skills

💡 Passion for Computer Science and Technology

🏃 Active and Physically Fit

👂 Strong Interpersonal Skills

🧠 Problem-solving & Critical Thinking

📖 Love of Learning

🗣️ Excellent Communication

👥 Teamwork & Independence

# Languages

🇬🇧 Native

🇮🇹 Native

🇩🇪 Fluent

🇪🇸 Basic

# Education

## Master in Artificial Intelligence

August 2021 - October 2023  
*Maastricht University, Netherlands*

## Minor in Computer Science

September 2018 - June 2021  
*University of Padua*

## Bachelor in Psychology

September 2018 - June 2021  
*University of Padua*

## Courses in Physics and Mathematics

September 2016 - December 2017  
*University of Leipzig*

## 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

"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