Linda Petrini

lindapetrini@gmail.com | +39 3516650672

LINKS

LinkedIn:// **petrinilinda**
Scholar:// **Linda Petrini**
Github:// **LindaPetrini**

SKILLS

AI

Interpretability • Computer Vision
Generative Models • Transformers
Representation Learning

Data visualization
Technical writing

PROGRAMMING

Proficient:
Python • TensorFlow
PyTorch • JAX
Pandas • Seaborn
git • Colab • LaTeX

LANGUAGES

Native:
Italian
Proficient:
English (IELTS C1) •
Russian • French

COURSEWORK

GRADUATE

Machine Learning
Deep Learning
Algorithms and Data Structures
Natural Language Processing
Computer Vision
Information Theory, Game Theory
Dynamical systems

UNDERGRADUATE

Linear Algebra
Analysis
Algebra
Geometry
Probability and Measure Theory
Numerical methods for ODEs
Statistics

VOLUNTEERING

Reviewer for NeurIPS, ICML, ICLR, AI for Social Good
Mentor at AI4Good Lab
Co-organiser of CVPR workshop "Ethical Considerations in Creative applications of Computer Vision"

EDUCATION

MILA - UNIVERSITÉ DE MONTRÉAL | PhD Student - CS

2021 - 2023

- Supervisors: Marc G Bellemare, Aaron Courville
- Topic: Deep Learning Interpretability for scientific discovery in Epigenomics.

UNIVERSITY OF AMSTERDAM | MSc Artificial Intelligence

2017 – 2019 | Cum Laude

- Thesis: *"Generalization in Representation Learning: understanding the role of Locality through Zero-Shot Learning."*

UNIVERSITY OF MILANO-BICOCCA | BSc Mathematics

WORK EXPERIENCE

AI TECHNICAL WRITER

Sep 2023 - Now | Remote

- Specialized in crafting detailed workshop reports, meeting memos, and articles on AI technologies.

GOOGLE - RESEARCH ASSOCIATE

Sep 2021- Jan 2023 | Google Brain - Montreal

- Led a team of 4 computer scientists and 4 epigenetics experts in adapting Deep Learning interpretability methods for scientific discovery, by training a predictive model on mice epigenome data, and interpreting it to inspire clinical experiments.
- Led a team of 4 people in developing a representation learning and sampling method for set data based on quantiles.

GOOGLE - AI RESIDENCY

Oct 2019 - May 2021 | Google Brain - Montreal/Zurich

- Investigated alternative Transformer model losses for text data using edit distance.
- Improved unsupervised normalization methods based on Optimal Transport for genomic data.

MILA - RESEARCH INTERNSHIP January-August 2019 | Montreal

- Designed and performed experiments to highlight the role of local information in Zero Shot Learning in the domain of Computer Vision.
- Developed Deep Learning interpretability method based on Mutual Information, resulting in a NeurIPS workshop publication.

TEACHER ASSISTANT | Machine Learning I

Nov 2018 – Dec 2018 | University of Amsterdam

- Tutored 30 students from MSc course "Machine Learning I".
- Designed and graded homework for 200 students.

PUBLICATIONS

LOCALITY AND COMPOSITIONALITY IN ZERO-SHOT LEARNING | Published as a conference paper at ICLR 2020

MUTUAL INFORMATION HEATMAPS AS A TOOL FOR INTERPRETABILITY | Workshop on Information Theory and Machine Learning (NeurIPS 2019)