Luca Zhou

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Education

Sapienza University of Rome & CUHK (Exchange)

2023 - 2025

MSc in Computer Science: AI-centered track

GPA: 4.0/4.0

University of Rome Tor Vergata

2020 - 2023

BSc in Computer Science

Final Grade: 110 Summa Cum Laude

Skills

Programming Languages & Tools: Python, PyTorch, Weights & Biases, PyTorch Lightning, Git, C/C++, Java, Prolog, SQL

Languages: Mandarin Chinese (Native), Italian (Native), English (Advanced)

Research

ATM: Enhancing Model Merging through Alternating Tuning and Merging

Sapienza University of Rome

Jun. 2024 - Present

- First-author paper (preprint available)
- Investigated the relationship between task vectors and multi-task gradients
- Developed an iterative model merging framework, improving task generalization

LLM-based Explanations for Mitigating the Clever Hans Effect

University of Rome Tor Vergata

Feb. 2023 - Jun. 2023

- Designed an explainable AI pipeline to detect and mitigate spurious correlations in datasets
- Fine-tuned BERT on refined datasets, achieving a 40% accuracy improvement over baseline models

Experience

Visiting Scholar

Department of Computer Science and Engineering, UCSD

Mar. 2025 - May 2025

- Conducting research on Time Series Captioning with LLMs under the supervision of Prof. Rose Yu Graduate Researcher

GLADIA, Sapienza University of Rome

Jun. 2024 - Feb. 2025

- Investigating novel approaches for multi-task learning and model merging

Workshop Reviewer

UniReps, NeurIPS 2024

Oct. 2024

Research Intern

Reveal SRL, Rome

Aug. 2023 - Dec. 2023

- Led a predictive analytics project in collaboration with the Italian Union of Chambers of Tourism
- Implemented and optimized the Informer transformer model to forecast Italian national tourism trends

Projects

Finger Photo Recognition System

 $Sapienza\ University\ of\ Rome$

Jan. 2023

- Developed a biometric recognition system leveraging finger-photo analysis
- Integrated transfer learning and contrastive learning for enhanced feature representation
- Achieved a perfect recognition rate (1.0) on the IIITD Fingerphoto dataset

Awards

Iliadship Scholarship & Mentorship

2023

- Selected as one of 10 recipients nationwide for a prestigious merit-based scholarship and mentorship program by Iliad

Extracurricular Activities

Board of European Students of Technology (BEST)

Fundraising Coordinator & Internal Relationships

Feb. 2021 - Jul. 2023