Andrea Cerutti

Computer Science and Engineering, Artificial Intelligence

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🎓 EDUCATION

Politecnico di Milano	*2023 - Dec 2025 (expected)*
*Master of Science	Computer Science and Engineering, Artificial Intelligence*	GPA: 28.8/30

Alta Scuola Politecnica (Politecnico di Milano/Politecnico di Torino)	*2024 - 2025*
Multidisciplinary closed number honour program	

EPFL	*Feb 2024 - Jul 2024*
*Exchange semester (merit based selection)	MS Computer Science*	GPA: 5.3/6

Politecnico di Milano	*2020 - 2023*
*Bachelor's Degree	Ingegneria Informatica*	Final Grade: 110 Cum Laude

🖧 PROJECTS & EXPERIENCE

Isolating Path Effect
Jan 2025 - Dec 2025 (expected)

Isolating Path Effect is a novel method to uncover the internal reasoning of Language Models

As part of my Master's Thesis I delved into the state of the art methods of mechanistic interpretability, methods aimed at explaining Large Language Models behavior. Our approach to circuit discovery will be published as part of BlackBox NLP (EMNLP Workshop). Our code has been published as a *python package* paired with a *web ui*.

PNRelay
May 2024 - Sep 2025

PNRelay is a project promoted by Politecnico di Milano aimed at solving peripheral nerve injuries

My role in the project is to research real-time electroneurography signal classification employing lightweight convolutional neural networks, suitable for implantable devices. **Publications:** (Coviello et al.) (Burinato et. al)

Politecnico Open unix Labs
2021 - Present

POuL is a student association that contributes to the promotion of free and open-source software (FOSS)

I have contributed by managing association's social networks, held lectures during courses (Arduino, Linux Day etc.), developed a simple *task management bot* to be used in telegram groups to manage deadlines.

HomeCube
Jul 2023 - Nov 2023

HomeCube was a startup aimed at the creation of a home assistant with contextual memory

In 2023 I took part on a rising project of creating a home assistant employing RAG systems paired with agentic function calling. Starting from cheshire-cat-ai framework we implemented different tools callable by the LLM, employing LangChain.

Field Robot Event
Mar 2023 - Jun 2023

FRE is a robotic event centered around autonomous navigation in an agricultural environment

I have contributed to the development of the sensing and mapping aspects of the robot presented by Politecnico di Milano at the 2023 FRE edition. Managed to integrate data from multiple LiDARs, perform ground plane removal and denoising. **Publication:** (Zinzani et al.)

</> SKILLS

Developer Tools: Python, PyTorch, TensorFlow, TransformerLens, Git, Docker, ROS2, Linux, MATLAB, Java, C

Research Area: Mechanistic Interpretability, Large Language Models, tiny ML, Deep Learning

🈂 LANGUAGE SKILLS

Italian: Native

English: Proficient (TOEIC: C1)

⚲ ACHIEVEMENTS

Migliori Matricole Award given by Politecnico di Milano to the freshmen with highest GPA	*2020 - 2021*
Studente dell'anno 2017-2018 Liceo G. Galilei's student of the year award	*2017 - 2018*
Lead The Future Mentee 1to1 mentorship program for highly talented Italian students	*2023 - Present*