Filippo Galli

Pisa, Italy - filippo.galli@sns.it

Education

Scuola Normale Superiore

Nov 2020 - Oct 2024

PhD in Data Science, graduated with honors

Pisa, Italy

- Thesis: Data Utility and User Privacy in Differentially Private Machine Learning
- Published research in top conferences and journals. Organized and secured funding for seasonal schools. Led collaborative research efforts involving multiple researchers and institutions. Served as Teaching Assistant for Logistics.

Politecnico di Torino Oct 2014 - Apr 2018

M.Sc. Mechatronic Engineering, 108/110

Torino, Italy

- Major: Robotic systems, perception, control and simulation
- International research experiences in top robotics labs and universities

Politecnico di Torino Sep 2

B.Sc. Electrical Engineering, 103/110

Sep 2011 - Oct 2014 Torino, Italy

• Major: Power generation, transmission and utilization

Work Experience

Meta Inc.

Jul 2023 - Oct 2023

Research Scientist Intern, Statistics & Privacy Team

New York City, NY, USA

• Published research on efficient privacy auditing techniques for large language models (LLMs).

• Developed and integrated privacy auditing tools based on my research into Meta's codebase.

Scuola di Studi Superiori Sant'Anna

Aug 2018 - Oct 2020

 $Research\ Collaborator,$ Real-time Systems Laboratory

Pisa, Italy

- Researched and optimized AI-driven data center operations, improving efficiency and resource allocation.
- Developed and deployed automation tools for a leading telecom company.

Hackmind Feb 2018 - May 2018

Fellow, Startup Incubation Program

Berlin, Germany

- Investigated computer vision applications for agricultural monitoring and automation.
- \bullet Conducted market research and feasibility studies, assessing commercial viability.

CERN - European Organization for Nuclear Research

Mar 2017 - Jan 2018

 ${\it Technical\ Student},\ {\it Magnetic\ Measurements\ Section}$

Geneva, Switzerland

- $\bullet \ \ {\rm Programmed} \ \ {\tt C++} \ \ {\rm drivers} \ \ {\rm for} \ \ {\rm robotic} \ \ {\rm systems}, \ {\rm enabling} \ \ {\rm precise} \ \ {\rm magnetic} \ \ {\rm field} \ \ {\rm mapping} \ \ {\rm in} \ \ {\rm dipoles}.$
- Contributed to the mechanical design of magnetic measurement systems for CERN experiments.
- Operated precision measurement instruments to analyze LHC magnet performance.

NASA - Jet Propulsion Laboratory

July 2016 - Jan 2017

Visiting Researcher Student, Robotics section

Pasadena, CA, USA

 Researched and implemented simulation and numerical trajectory optimization for drones using nonlinear MPC.

Additional Information

Relevant courses: Private Equity and Venture Capital, Università Bocconi, Jan 28, 2025

Selected publications: Galli, F., Melis, L., Cucinotta, T. (2024). Noisy Neighbors: Efficient membership inference attacks against LLMs. *PrivateNLP Workshop at ACL 2024*

 $\textbf{Patent:} \ \ \text{European and Italian Patent} \ \ \text{EP4016963A1} \ / \ \ \text{IT102020000031034}, \ \text{``A method for the resource management of a Network Function Virtualization Infrastructure''}$

Language Skills: Italian (native), English (fluent), French (basic), German (basic)

IT Skills: MS Office, Python, C/C++, Pytorch, Sciki-learn, Pandas, Numpy, Git, Linux, Cloud Computing (GCP), Kotlin/Java

AI Skills: NLP, LLMs and transformer architectures, computer vision and CNNs, classical and modern machine learning, generative and discriminative models.