

FRANCESCO FERRINI PH.D.

EDUCATION	University of Trento <i>Ph.D. in Artificial Intelligence and Machine Learning</i> • Research: Graph Neural Networks, Missing Data, Relational Learning	Trento, Italy 2022 - 2026
	University of Trento <i>M.Sc. in Artificial Intelligence Systems cum laude</i> • Thesis: Learning on multi-relational graphs	Trento, Italy 2020 - 2022
	University of Verona <i>B.Sc. in Computer Science</i> • Thesis: Robot planning in unknown scenario	Italy 2016 - 2020
EXPERIENCES	Artificial Intelligence Research Center, AIST <i>Research internship</i> • Topic: Learning on graphs with missing features / incomplete data	Tokyo, Japan 2025
	Aalborg University <i>M.Sc. research internship</i> • Topic: Benchmarking and profiling of multi-relational GNN models	Aalborg, Denmark 2022
	Nexsys <i>System Engineer</i>	Verona, Italy Mar 2020 – Sep 2020
PUBLICATIONS	<ol style="list-style-type: none">1. Francesco Ferrini, Veronica Lachi, Antonio Longa, Cesare Barbera, Andrea Pugnana, Andrea Passerini, Manfred Jaeger. On the Global and Local Calibration of Graph Neural Networks. <i>AISTATS Calibration for Modern AI Workshop</i>, 2026.2. Francesco Ferrini, Veronica Lachi, Antonio Longa, Bruno Lepri, Matono Akiyoshi, Xin Liu, Andrea Passerini, Manfred Jaeger. Rethinking GNNs and Missing Features: Challenges, Evaluation and a Robust Solution. <i>ICML</i>, 2026.3. Francesco Ferrini, Veronica Lachi, Antonio Longa, Bruno Lepri, Xin Liu, Andrea Passerini, Manfred Jaeger. Beyond Sparse Benchmarks: Evaluating GNNs with Realistic Missing Features. <i>NeurIPS NPGML Workshop</i>, 2025.4. Francesco Ferrini*, Veronica Lachi*, Antonio Longa, Bruno Lepri, Andrea Passerini. GNNs Meet Sequence Models Along the Shortest-Path: an Expressive Method for Link Prediction. <i>NeurIPS NPGML Workshop</i>, 2025.5. Francesco Ferrini*, Veronica Lachi*, Antonio Longa, Bruno Lepri, Andrea Passerini, Manfred Jaeger. Bridging Theory and Practice in Link Representation with Graph Neural Networks. <i>NeurIPS</i>, 2025.6. Francesco Ferrini, Antonio Longa, Andrea Passerini, Manfred Jaeger. A Self-Explainable Heterogeneous GNN for Relational Deep Learning. <i>TMLR</i>, 2025.7. Veronica Lachi, Francesco Ferrini, Antonio Longa, Bruno Lepri, Andrea Passerini. A simple and expressive graph neural network based method for structural link representation. <i>ICML Workshop</i>, 2024.8. Francesco Ferrini, Antonio Longa, Andrea Passerini, Manfred Jaeger. Meta-Path Learning for Multi-relational Graph Neural Networks. <i>LOG</i>, 2023.9. Wamiq Raza, Anas Osman, Francesco Ferrini, Francesco De Natale. Energy-efficient inference on the edge exploiting TinyML capabilities for UAVs. <i>MDPI, Drones</i>, 2021.	

TECHNICAL SKILLS	<p>Programming Languages: Python (advanced), scientific libraries (NumPy, Pandas, SciPy)</p> <p>Deep Learning Frameworks: PyTorch (custom models, GNNs, sequence models), PyTorch Geometric, DGL</p> <p>Profiling and Optimization: PyTorch Profiler, TensorBoard; performance and memory analysis of GNNs and sequence models</p> <p>Benchmarking and Synthetic Datasets: Benchmark design for GNNs on real and synthetic data; generation and usage of synthetic datasets for controlled experiments</p> <p>Machine Learning and AI: Graph Neural Networks, sequence models (GRU, LSTM, Transformer), missing data imputation, fairness and robustness</p>
ACTIVITIES	<ul style="list-style-type: none"> • Conference Reviewer: NEURIPS 2026, ICML 2026, ICLR 2026, AAAI 2025, ICML 2025, ICLR 2024, LOG 2023, LOG 2024 • Program Committee, LOG (2025) — Reviewing Chair for Learning On Graphs Conference 2025 • Oxford Machine Learning Summer School, Oxford, UK — Representation Learning and Generative AI (2024) • Oral at LOG Conference, LOG (2023) — Oral presentation of Meta-Path Learning for Multi-relational Graph Neural Networks • Heterogeneous Graph Learning tutorial, Alan Turing Institute (2023) — Hands on tutorial on heterogeneous graph learning • Organizer, LOG Meetup Trento (2023) — Organized the 4-day Italian LOG event in Trento
AWARDS AND HONORS	<ul style="list-style-type: none"> • Top Reviewer Award, Learning on Graphs Conference 2024