

# Steve Azzolin

☎ (+39) 346-2216654 | ✉ [steve.azzolin@unitn.it](mailto:steve.azzolin@unitn.it) | 🏠 [steveazzolin.github.io](https://steveazzolin.github.io) | 📄 [steveazzolin](#) | 🔗 [steve-azzolin](#) | 🐦 [@steveazzolin](#)

## Education

### Fondazione Bruno Kessler

ELLIS PH.D. STUDENT

- Supervisors: Bruno Lepri & Andrea Passerini
- ELLIS partner: Pietro Liò (University of Cambridge)

Trento, IT

Nov. 2023 - Curr

### University of Cambridge

RESEARCH VISITING STUDENT

- Thesis: Global Explainability of **GNNs** via Learned Logic Formulas

Cambridge, UK

June. 2022 - Sept. 2022

### University of Trento

M.S. IN ARTIFICIAL INTELLIGENCE SYSTEMS

- Final score: 110/110 cum laude

Trento, Italy

Sept. 2020 - March. 2023

### University of Trento

B.S. IN COMPUTER SCIENCE

- Final score: 110/110 cum laude
- Thesis: Unsupervised learning for customer segmentation and its **interpretability**

Trento, Italy

Sept. 2017 - Jul. 2020

## Research Experience

### Structured Machine Learning Lab

RESEARCH ASSISTANT

- Benchmarked and surveyed several SOTA tools for GNN Explainability

Trento, Italy

May 2022 - Oct. 2023

### Signals & Interactive Systems Lab

RESEARCH INTERN

- Tested, developed, and analyzed **Deep Sentiment Analyzer** for Italian corpora
- Improved the state-of-the-art for the Italian language from 0.64 to 0.69 of F1 score

Trento, Italy

Feb. 2020 - Jan. 2022

### Blue Reply

MACHINE LEARNING INTERN

- Applied and optimized **Unsupervised ML** techniques for customer segmentation

Padova, Italy

Feb. 2020 - Jun. 2020

### FG Fiorentin

SOFTWARE ENGINEER

- Developed CRM software and the DB infrastructure

Vicenza, Italy

Sept. 2017 - Jan. 2019

## Publications

- M. Jaeger, A. Longa, **S. Azzolin**, O. Schulte, A. Passerini "A Simple Latent Variable Model for Graph Learning and Inference". LOG 2023
- **Azzolin S.**, Longa A., Barbiero P., Liò P., Passerini A. "Global Explanability of GNNs via Logic Combination of Learned Concepts". ICLR 2023
- **Azzolin S.**, Longa A., Barbiero P., Liò P., Passerini A. "Global Explanability of GNNs via Logic Combination of Learned Concepts". LOG 2022, Extended Abstract
- Longa A., **Azzolin S.**, Santin G., Cencetti G., Liò P., Lepri B., Passerini A. "Explaining the Explainers in Graph Neural Networks: A Comparative Study". ACM Computing Surveys (Under Review)
- Roccabruna G.\*, **Azzolin S.\***, Riccardi G. "Multi-source Multi-domain Sentiment Analysis with BERT-based Models". LREC 2022
- Mousavi S., Roccabruna G., Tammewar A., **Azzolin S.**, Giuseppe Riccardi "Can Emotion Carriers Explain Automatic Sentiment Prediction? A Study on Personal Narratives". WASSA @ ACL 2022

## Talks & Tutorials

### Alan Turing Institue

- Hands-on Tutorial on XAI4GNNs

Virtual

16 Nov. 2023

### EVIL Meeting

- Presented the ongoing work for a project on Continuous Prompt Transferability for Large Language Models

Virtual

16 Oct. 2023

### AIT Journal Club

- Presented the work *Global Explainability of GNNs via Logic Combination of Learned Concepts*

In person

3 Feb. 2023

## Cambridge Talks 2022

- Presented the work *Global Explainability of GNNs via Logic Combination of Learned Concepts*

Virtual

24 Nov. 2022

## Networks

---

### LOG Local Meetup

ORGANIZER

Nov. 2023

- Organized the first Italian local branch of the LOG 2023 conference, providing an environment for researchers in this field to foster networking.

### Lead the Future

MENTEE & REVIEWER

Sep. 2021 - Curr.

- LeadTheFuture is a leading mentorship non-profit organization for students in STEM, with an acceptance rate below 20, empowering top-performing students to achieve their goals and contribute to their communities

## Extracurricular Training

---

### Cambridge ELLIS Machine Learning Summer School

ATTENDEE

July. 2022

### Eastern European Machine Learning Summer School

ATTENDEE

July. 2022

### Serbian Machine Learning Workshop

ATTENDEE

May. 2022

### CMMRS 2021

ATTENDEE

Aug. 2021

## Competitions & Awards

---

### COMPETITIONS

2019 **Finalist**, Soccer Data Challenge

Trento, Italy

2017 **First Place**, Memorie Migranti Video Making National Contest

Gualdo Tadino, Italy

2015 **Finalist**, Robocup Junior Italia

Milan, Italy

### AWARDS

2023 **Awarded**, 6 months Research Scholarship at the University of Trento

Trento, Italy

2017-2019 **Awarded**, Opera Universitaria Annual Scholarship

Trento, Italy

2017 **Awarded**, Mason Vicentino Scholarship for Academic Merits

Colceresa, Italy