# Martina Boschi

PhD Candidate

Faculty of Informatics
Institute of Computing
Social Network Analysis Research Center
at Università della Svizzera italiana

martina.boschi@usi.ch
martinaboschi.github.io
Github in Linkedin



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#### **Research Interests**

My research focuses on **network science**, particularly on **statistical modeling of time-stamped relational data**. I specialize in developing methodological advances for relational event models.

#### **Academic Positions**

- Dec, 2022 **PhD candidate in computational science**, *Institute of Computing, Università della Svizzera* present *italiana*, Lugano, Switzerland, Advisor: Prof. **Ernst C. Wit**.
  - Network science.
  - Relational event models.

(personal webpage)

- 2023 **Teaching assistant**, Faculty of Informatics, Università della Svizzera italiana, Lugano, Switzerland.
- present o Designing and delivering practical tutorials,
  - Student assessment and supervision.

(personal webpage)

- Jan, 2025 Visiting PhD student, Mathematics and Statistics, McGill University, Montreal, Quebec, Canada,
- May, 2025 Advisor: Prof. Eric D. Kolaczyk.
  - Graph sampling techniques.
- Feb, 2022 Visiting research trainee, Institute of Computing, Università della Svizzera italiana, Lugano,
  - Jun, 2022 Switzerland, Advisor: Prof. Ernst C. Wit.
    - Network science,
    - Relational event models.
- 2020 2023 **Teaching assistant**, Department of Statistical Sciences, Alma Mater Studiorum University of Bologna, Bologna, Italy.
  - Designing and delivering practical tutorials,
  - Student assessment and supervision,
  - Tutoring for students with disabilities.
  - Jul, 2021 **Research trainee**, Department of Statistical Sciences, Alma Mater Studiorum University of Sep, 2021 Bologna, Bologna, Italy, Advisor: Prof. **Daniele Ritelli**.
    - o Computer algebra in differential equation treatment,
    - Nonlinear oscillators via Chebyshev quintic approximations.

### Academic Service and Outreach

- Sep, 2024 **Student Mentor, BSc in Data Science**, *Faculty of Informatics, Università della Svizzera* present *italiana*, Lugano, Switzerland.
  - o Organizing regular meetings with mentees to ensure their progress,
  - Helping students address questions and difficulties.

- Oct, 2023 Contributor to Outreach and Promotion, BSc in Data Science, Faculty of Informatics, present Università della Svizzera italiana, Lugano, Switzerland.
  - Developing materials for university orientation days,
  - Preparing informational resources for incoming students,
  - o Organizing and participating in high school outreach events to promote engagement with data science.

### **Industry Positions**

- 2019–2020 **Data Analyst (Occasional collaborator and internship trainee)**, *Notari Ricerche*, Casalecchio di Reno, Bologna, Italy.
  - Market analysis.
  - Data collection.

### **Education**

- 2022 2024 PhD qualifying exams, Università della Svizzera italiana, Lugano, Switzerland.
- 2020 2022 MSc in Statistical Sciences Curriculum: Data Science, Department of Statistical Sciences, Alma Mater Studiorum University of Bologna, Bologna, Italy.

  Final grade: 110/110 cum Laude
- Feb, 2022 **Swiss-European Mobility Programme**, *Institute of Computing, Università della Svizzera italiana*, Jun, 2022 Lugano, Switzerland.
  - Oct, 2021 **Teaching in secondary schools 24 CFUs**, Alma Mater Studiorum University of Bologna, Bologna, Italy.
    - Basic anthropological and psycho-pedagogical disciplines,
    - Teaching methodologies and technologies.
- Sep, 2019 **Erasmus+**, *Université Paris 2 Panthéon Assas*, Paris, France. Feb, 2020
- 2017 2020 **BSc in Scienze Statistiche Curriculum: Economia e Impresa**, *Department of Statistical Sciences, Alma Mater Studiorum University of Bologna*, Bologna, Italy. Final grade: 110/110 cum Laude

# **E** Teaching

#### Teaching Assistantship

- Fall, 2025 Introduction to Data Science (BSc), Faculty of Informatics, Università della Svizzera italiana, Lugano, Switzerland.
  - Course Director: Ernst C. Wit
- Fall, 2023, Probability & Statistics (BSc), Faculty of Informatics, Università della Svizzera italiana, Lugano,
- Fall, 2024 Switzerland.
  - Course Directors: Francisco J. Richter Mendoza, Ernst C. Wit
- Spring, 2023 **Graph Deep Learning (MSc)**, *Faculty of Informatics*, Università della Svizzera italiana, Lugano, Switzerland.
  - Course Director: Cesare Alippi
- Spring, 2023 Linear Models (BSc), Department of Statistical Sciences, Alma Mater Studiorum Università di Bologna, Bologna, Italy.
  - Course Director: Angela Montanari
- 2020 2022 **Tutoring for students with disabilities**, *Department of Statistical Sciences*, Alma Mater Studiorum Università di Bologna, Bologna, Italy.

#### Thesis Co-supervision

Sep, 2023 **Jahmaira Archbold**, *Master Thesis: Smooth Relational Event Models: Analysis of Alien Fish Invasions via Case-Control Sampling Inference*, Faculty of Informatics, Università della Svizzera italiana.

Lugano, Switzerland

## Funding

2025 NGI Enrichers Transatlantic, Next Generation Internet.

Amount: CHF 15200

### **Awards**

2022 Member of the winning team, SAS Curiosity Cup, Category: Data Analysis.

Team: Martina Boschi, Sara Rinaldini

2022, 2020, University Grant for Best Performing Students, Alma Mater Studiorum - Università di

2019 Bologna, Bologna, Italy.

## **Publications**

#### Journal Articles

- 2025 Martina Boschi and Ernst C. Wit. Goodness of fit in relational event models. *Statistics and Computing*, volume 36, page 4, October 2025.
- 2025 Martina Boschi, Rūta Juozaitienė, and Ernst C Wit. Mixed additive modelling of global alien species co-invasions of plants and insects. *Journal of the Royal Statistical Society Series C: Applied Statistics*, page qlaf034. Oxford University Press UK, 2025.
- 2024 Martina Boschi, Daniele Ritelli, and Giulia Spaletta. Exact time—integral inversion via čebyšëv quintic approximations for nonlinear oscillators. *Journal of Mathematical Analysis and Applications*, volume 533, page 128015. Elsevier, 2024.

#### **Preprints**

2025 Martina Boschi, Jürgen Lerner, and Ernst C Wit. Beyond linearity and time-homogeneity: relational hyper event models with time-varying non-linear effects. *arXiv preprint arXiv:2509.05289*, 2025.

# Talks

Nov, 2025 **Swiss Statistics Meeting**, Geneva, Switzerland.

Oral presentation

Oct, 2025 ARS'25: Tenth International Workshop on Social Network Analysis, Naples, Italy.

Oral presentation

Oct, 2025 International Day Of Women in Statistics and Data Science, Online.

Oral presentation

Jun, 2025 **Sunbelt Conference**, Paris, France.

Workshop instructor & Oral presentation

Sep. 2024 Innovation in dynamic network modelling, Lugano, Switzerland.

Workshop co-organizer & Oral Presentation

Aug, 2024 Bernoulli-IMS 2024 World Congress, Bochum, Germany.

Oral presentation

Jul, 2024 International Workshop on Statistical Modelling, Durham, United Kingdom.

Oral presentation

- Jun, 2024 **Sunbelt Conference**, Edinburgh, United Kingdom. Workshop instructor & Oral presentation
- Sep, 2023 **CEN 2023: 5th Conference of the Central European Network**, Basel, Switzerland. Poster presentation
- Jun, 2023 **Bernoulli Society workshop on Sparse Inference of Complex Networks**, Lugano, Switzerland. Poster presentation
- May, 2023 ARS'23: Ninth International Workshop on Social Network Analysis, Ischia, Italy.

  Oral presentation

### Attended Conferences, Workshops & Schools

Jul, 2025 Researchers of Statistics Education Network Conference, Online.

Attendee

May, 2025 CLeaR 2025, Lausanne, Switzerland.

Attendee

- Jan, 2024 **14th Winter School Longitudinal Social Network Analysis**, Groningen, Netherlands. Attendee
- May, 2023 **Complex Networks: Theory, Methods and Applications**, Como, Italy. Attendee

### Computer Skills

Programming Languages, R, Python.

### Other Skills

2024 – **Flautist**, *Filarmonica Pregassona*, Pregassona, Switzerland. present

2015 – 2024 Flautist & Member of Board of Directors, Corpo Bandistico Pietro Bignardi, Monzuno, Italy.