

Maddalena Torricelli

Curriculum Vitae et Studiorum



Contacts

maddalena.torricelli@gmail.com

Digital Hub

maddalena.torricelli.me

Google Scholar

Github

Languages

IT (Native)

EN (Advanced)

ES, FR, DE (Basic)

Code Stack

Python

Pandas, Numpy, Scipy, NetworkX, Gensim, Matplotlib, Seaborn, Pytorch

R

ggplot2, caret, glmnet

HTML, CSS, Javascript

basic knowledge

LateX

DataViz

d3.js, Vega Lite, Google Data Studio

Intensive course on effective visualization of data with d3.js and Vega Lite (Big Dive, Torino (IT), 2020)

Working Experience

- 2025 - **Postdoctoral Research Associate** Northeastern University - NetSI Hub, USA
Sports analytics
Research topics: application of network science and data analytics to sports systems; leveraging complex systems theories and methods to address sports-related challenges.
- 👤 Outreach and networking activities at major sports conferences (MIT Sloan Sports Analytics Conference (2025), MIT Sports Summit (2024,2025))
- 2021 - 2023 **Postdoctoral Research Associate** City University of London, UK
Climate change on social media
Research topics: polarization and misinformation spread on social media about climate change; quantifying social perception of climate change and natural disasters.
- 👤 Teaching activity: Number Theory and Cryptography - Mathematics Dept.
📅 Events organization: Data Natives (2022,2023), Complexity 72h (2023)

Education

- 2017 - 2021 **PhD in Data Science and Computation** Alma Mater Studiorum di Bologna, Italy
Thesis: Embedded representations of social interactions
- 2015 - 2017 **MSc in Physics of Complex Systems** Università degli Studi di Torino, Italy
Thesis: Party cohesiveness in the Italian Parliament (1987-2013)
M.Sc.: 110/110 cum laude

Selected Publications

- 2025, Feb **Unveiling the drivers of active participation in social media discourse** Nature Scientific Reports
- 2025, Jan **Temporal dynamics of goal scoring in soccer** arXiv:2501.18606
- 2024, May **The role of interface design on prompt-mediated creativity in Generative AI** WEBSCI '24: Proceedings of the 16th ACM Web Science Conference
- 2023, Nov **How does extreme weather impact the climate change discourse? Insights from the Twitter discussion on hurricanes** PLOS Climate
- 2020, Apr **weg2vec: Event embedding for temporal networks** Nature Scientific Reports

A full list of publications is available on my Google Scholar profile.

Selected conferences, talks, projects and workshops

- 2024, Oct **Northeastern University - NetSI Hub** Boston, MA (USA)
Invited talk: Network Analytics and Data Science Insights from Social Systems to Sports
- 2024, May **WEBSCI Conference** Stuttgart (DE)
Oral presentation: The role of interface design on prompt-mediated creativity in Generative AI (24.05.2024).
- 2023, Oct **CCS Conference** Salvador, Bahia (BR)
Oral presentation: How does extreme weather impact the climate change discourse? Insights from the Twitter discussion on hurricanes (20.10.2023).
- 2023, Jun **Sònar+D** Barcelona (ES)
Collaboration with the EXPLAIN Project: analyzing lyrics and music of Sònar festival artists to detect patterns and track their evolution.
- 2019, May **NetSci Conference** Burlington, VT (USA)
Oral presentation: Temporal network embedding for the estimation of spreading process outcome (29.5.2019).