

Giulia Bertagnolli

PhD. Student @unitn,
Math and Complex Network Science



gbertagnolli.github.io



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/giuliabertagnolli

Interests

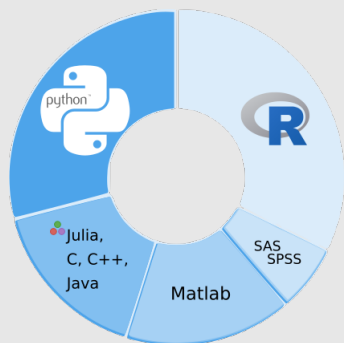
Network Geometry

Network Structure and Centralities

Statistics & Network Viz

Complex Systems and Dynamics

Programming



Free Time

Books - Science books, biographies, detective novels...

Music - I play the clarinet in wind bands; I love music, from classical to progressive metal...

Sport - Hiking, Skiing, Swimming...

Cooking - Seasonal works in restaurants and a bakery...

Soft Skills



Experience

Dec 2018 -

Oct 2018

Intern at CoMuNe Lab - FBK

CoMuNe Lab - FBK

I developed here my research activity for the MSc and wrote my MSc thesis - *Complex Networks and Statistical Data Depths*.

I am currently studying Network Geometry induced by complex dynamics and new statistical approaches to identify influential nodes in networked systems as well as meso-scale structures.

May 2016 -

Oct 2016

Intern Data Scientist

TIM JOL SKIL Lab - FBK

Data Science on telecommunication data, CDRs in particular.

Achievements:

- I developed a python library for the preprocessing of raw CDRs.
- Working with PhD.s of the Mobs Lab (FBK), we build a new communication metric for cities communication and found evidence of cultural influence on call activity rhythms and patterns of TIM users along Italy.

May 2015 -

Oct 2015

Data Analyst Intern

Residencehotel S.p.a. Trento

With several hotels and residences in Trentino Alto Adige, Residence-hotel Spa has a social capital of €15M. During my internship:

- I developed new macros and UDFs in Excel for the analysis of data (booking engine, social networks), programming in VBA (Visual Basic for Applications).
- I build the new website www.residencehotel.it with Joomla!3 and a lot of custom CSS and Javascript.

Education

2018 - 2021 **PhD., Mathematics**

University of Trento

Trento, Trentino A. A., Italy

PhD Project: *Modeling Geometry of Complex Networks*.

Advisors: *M. De Domenico*, CoMuNe Lab FBK and *C. Agostinelli*, unitn

2016 - 2018 **MSc., Mathematics for Life Sciences**

UniTn, CoMuNe-FBK

Trento, Trentino A. A., Italy

Thesis Title: *Complex Networks and Statistical Data Depths*

Thesis Advisors: *C. Agostinelli*, unitn and *M. De Domenico*, CoMuNe Lab FBK

2025 - 2016 **Master Universitario di I livello, Data Science**

Bologna Business School

Bologna, Emilia Romagna, Italy

2010 - 2014 **BSc., Mathematics**

University of Trento

Trento, Trentino A. A., Italy

Thesis Title: *Common Principal Component Analysis with Applications*

Advisor: *P. Novi Inverardi*, unitn

2005 - 2010 **Diploma Liceo Linguistico**

Liceo Bertrand Russell

Cles, Trentino A. A., Italy

Exchange Student Theo-Koch-Schule Grünberg, DE in 2008-2009

Publications & Conferences

March, 21 2019 - **CompleNet'19**: *Contributed Talk: Statistical Data Depths and Complex Networks*.

Network depth: identifying median and contours in complex networks. arxiv preprint **arXiv:1904.05060** [stat.ME]