Marta Bonsaglio | CV

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Education

Università Bocconi   **Milan, Italy**
Ph.D. in Statistics   *Sep. 2017 – January 2022 (expected)*

During the first and second year of the program I have strengthened my knowledge of statistical theory, stochastic processes, data analysis and ML. In the third and fourth year I have collaborated with high-qualified researchers from Bocconi and Harvard university, facing challenging problems in theoretical statistics, applied mathematics and data science.

I am member of the following statistics initiatives: *BayesLab* research unit at Bocconi University and *Complex Data Modeling Research Network* by MiDas.

Thesis advisors: Prof. Sandra Fortini (Bocconi University) and Prof. Lorenzo Trippa (Harvard University).

Università degli Studi di Milano-Bicocca   **Milan, Italy**
M.Sc. in Applied Mathematics   *Sep. 2013 – Feb. 2016*

I specialized in numerical analysis, with the aim of learning high-level competences for the formalization and the consequent mathematical analysis of problems arising from applied sciences, finance and technologies.

Thesis supervisor: Prof. Alessandro Russo.
Final mark: 110/110 cum laude.

Università degli Studi di Milano-Bicocca   **Milan, Italy**
B.Sc. in Mathematics   *Sep. 2010 – Oct. 2013*

The bachelor provided me knowledge in the fundamental fields of mathematics (algebra, analysis, geometry, probability) as well as physics and computer science.

Thesis supervisor: Prof. Alessandro Russo.
Final mark: 110/110 cum laude.

Liceo Scientifico Marie Curie   **Meda (MB), Italy**
Scientific High School Diploma   *Sep. 2005 – Jun. 2010*
Final mark: 100/100.

Outreach and Scolarships

Bocconi Summer School in Advanced Statistics and Probability   **Como, Italy**
Summer School   *July 2018*

Bocconi University Phd Scholarship   **Milan, Italy**
Scholarship   *Sep. 2017 - Present*

Università degli studi di Milano-Bicocca Scholarship for Academic Achievement **Milan, Italy**
Scholarship   *2010-2011*

I have been awarded with a merit-based scholarship designed to encourage students of scientific subjects.

Academic Experience

Articles

Bonsaglio M, Fortini S, Ventz S, Trippa L (2021+). Approximating the operating characteristics of Bayesian Uncertainty Directed Trial Designs, arXiv:2105.11177

Bonsaglio M, Fortini S, Ventz S, Trippa L (2021+). Incorporating external data in the design of novel trials (working paper)

Referee activities

Referee for the journals *Sankhya* and *Clinical trials.*

Work experience

Bocconi University   **Milan, Italy**

Researcher in Statistics   *Sep. 2017 – Present*

I have developed projects in collaboration with researchers from Bocconi and Harvard university, joining theory of statistical inference and probability, as well as Bayesian and frequentist methods, Monte Carlo simulations and programming, proposing advanced statistical solutions to analyse data and address complex problems (mainly in clinical setting). Also, I have greatly enriched my interdisciplinary knowledge and I have kept up-to-date on advances in analytical, AI and ML techniques by attending weekly seminars at Bocconi and I have presented my work and findings at international conferences.

MIUR - Liceo scientifico Marie Curie   **Meda, Italy**

Professor of Mathematics and Physics   *Sep. 2016 – Jul. 2017*

Altran   **Milan, Italy**

Internship   *May. 2016 – Aug. 2016*

I was involved in two projects concerning the development of novel technological devices for big companies headquartered in Milan: my main duties were to define KPIs, monitor data over real-time dashboards, evaluate key metrics and support decision making.

Volunteer work

2019: Volunteer for the European Researchers' Night, Milan

2015: Volunteer for Expo 2015, Milan

Programming Skills

Very good: R, Matlab, MS Office

Good: Python

Basic: Java

Language Skills

Italian: Mothertongue

English: Fluent

Interests

Cooking, Collecting, Traveling, Zumba