

Simone Maria Giancola

Milan, Italy

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EDUCATION

Bocconi University

MS Data Science

Milan, ITA

August 2021 – July 2023

- GPA: 28.96/30
- Modules include: Advanced Machine Learning, Optimization, Stochastic Processes

Arizona State University

Undergraduate Exchange Program

Phoenix, USA

January 2021 - May 2021

- GPA 4.17 / 4.00, 4 classes
- Graduate level modules: Quantum Computation, Modeling with Game Theory

Bocconi University

BS Economics, Management and Computer Science

Milan, ITA

August 2018 - July 2021

- Grade 110 Cum Laude / 110, final GPA 29.18 / 30
- Thesis: “Value of Information in a Support Vector Machine, an exploration”
- Modules include: Advanced Statistical Methods, Applied Mathematics, Machine Learning

EXPERIENCE

Visiting Student

Bocconi Institute for Data Science

March 2022 - Present

Milan, ITA

- Advisors: Professors Lucibello C. and Saglietti L., Computing Sciences Department
- Participation to research projects

Data Science Intern

Santagostino Clinic

January 2022 - March 2022

Milan, ITA

- Automated monthly report
- Identified customers' origin among services offered

Research Assistant

Bocconi University, advisor: Professor Borgonovo E.

January 2021 - May 2021

Milan, ITA

- Conducted research on extraction of a Value of Information measure from a SVM algorithm
- Experienced: programming, academic research, paper reading, thesis writing

Technology Analyst

Barclays Bank PLC

July 2020 - August 2020

Radbrooke, UK

- Assigned to Application Performance Monitoring team, delivered documentation on main tools.
- Raised > 1000 GBP in an internal charity fundraising for the NHS

PORTFOLIO

Geometric Deep Learning Lecture Notes

Ongoing

- Redacted lectures and talks on the topic
- Keywords: Group Theory, Statistical Learning, Neural Networks, Topology

Bayesian MCMC probit analysis | co-authored

December 2021

- Composed document with Theory and implementation
- Keywords: Gibbs Instrumental Algorithm, Metropolis Random Walk Algorithm

Heartbeat Classification and Disease Detection

September 2020

- Classified patients using a Random Forest after analysis and exploration
- Identified condition with 90% accuracy from a single heartbeat

COVID-19 Analysis | co-authored

April 2020

- Visualization and prediction with Italian data
- Estimated low boundary time to extinction of the pandemic with curve fitting

TALKS

Bipartite Matching & extensions

June 2022

- Report and Presentation on aspects of the assignment problem
- Keywords: Linear Algebra, Graph Theory, Duality, Hungarian Algorithm, admissible transformation theory, Pfaffian orientations

Advanced Session, Harvard mini-course on Computation

January 2022

- Report and presentation on Simulated Annealing
- Keywords: Simulated Annealing, Statistical Mechanics, TSP

SKILLS

Advanced Python, Latex, Sklearn, Numpy, Matplotlib, Scipy;

Certifications Deep Learning and AI for Medicine by DeepLearning.AI;

Intermediate Keras, Tensorflow, Git, Unix, R, SQL, Matlab, C++



LANGUAGES

English (Advanced) IELTS 8.0



Italian (mother tongue); Spanish (Basic)

SELF STUDY

• **Physics**

- *Foundations of Physics @Bocconi* () , Introduction to Mechanics, Kleppner and Kolenkov
- *Statistical Mechanics @Stanford* () , Concepts in Thermal Physics, Blundell

• **Deep Learning Theory**

- *Geometric Deep Learning course and book*, Bronstein, Bruna, Cohen, Veličković ()
- *First Italian School in Geometric Deep Learning 25th-28th July 2022* ()

PROFILE & INTERESTS

Passionate about Statistics, Mathematics and Computer Science. Result driven, detail oriented, and able to apply theoretical knowledge to solve real world problems. Fast learner, moved by curiosity. Good team player, whilst able to work independently and take up responsibility.

In my spare time I enjoy playing Rugby - which I practiced at a regional competitive level for four years.