Lorenzo Testa

Thursday 24th November, 2022

PERSONAL INFORMATION

Date of birthSeptember, 6th 1998AddressVia Röntgen 1, Milan, ItalyE-mail1.testa@sssup.itWebsitetestalorenzo.github.ioOrcid0000-0003-2782-4846

RESEARCH INTERESTS

High-dimensional statistics; optimal prediction theory; statistical stability; functional data and network analysis

EDUCATION

M.Phil. in Statistics and Computer Science 2022-

Bocconi University, Italy

Master of Philosophy (first year Ph.D. courses) in "Statistics and Computer Science" · Expected graduation: June 2023

Sant'Anna School of Advanced Studies, Italy

Competitive honors program ($\approx 5\%$ admission rate) · 5-year full government-funded scholarship (housing, canteen, travel grants), honor courses, yearly dissertations, language studies and GPA requirements

Master Diploma in Economics

- → 2020- · Master Diploma in "Economics" · GPA: 29.5/30 · Expected graduation: March 2023
- Diploma in Economics
- → 2017–2021 · Diploma in "Economics" · Final grade: 100/100 cum laude (highest honors)

University of Pisa, Italy

M.Sc. in Data Science \rightarrow 2020–2022 · Master of Science in Data Science ("Data Science and Business Informatics", LM-18) · Final grade: 110/110 cum laude (highest honors)

B.Sc. in Economics

→ 2017–2020 · Bachelor degree in Economics ("Economia e Commercio", L-33) · Final grade: 110/110 cum laude (highest honors) and special mention · Graduated in February 2020, one semester ahead of the standard term

High School Diploma 2012-2017

Liceo Scientifico Filippo Lussana, Italy

Final grade: 100/100

RESEARCH & PUBLICATIONS

*: equal contribution; [⊠]: correspondence

Published papers

- 1. Esposito, C.*, Gortan, M.*, Testa, L.* $^{\bowtie}$, Chiaromonte, F. $^{\bowtie}$, Fagiolo, G., Mina, A., Rossetti, G. · Venture capital investments through the lens of network and functional data analysis · Applied Network Science 7, 42 (2022)
- 2. Boschi, T., Di Iorio, J., Testa, L., Cremona, M. A. $^{\boxtimes}$, Chiaromonte, F. $^{\boxtimes}$ · Functional data analysis characterizes the shapes of the first COVID-19 epidemic wave in Italy · Scientific Reports 11, 17054 (2021)

Book chapters & Conference proceedings

- 3. Esposito, C.*, Gortan, M.*, Testa, L.*™, Chiaromonte, F., Fagiolo, G., Mina, A., Rossetti, G. · Can you always reap what you sow? Network and functional data analysis of venture capital investments in health-tech companies · Proceedings of the 10th International Conference on Complex Networks and Their Applications (2021)
- 4. Papa, S., Rosi, B., Testa, L. $^{\boxtimes}$, Vaselli, F., Rossetti, G. · Inequality in the menu: how a network of restaurants characterizes social disparities in Boston · Book of Abstracts of the 10th International Conference on Complex Networks and Their Applications (2021)

Preprints & Working papers

- 5. Boschi, T., Testa, L., Reimherr, M., Chiaromonte, F. \cdot FAStEN: an efficient adaptive method for feature selection and estimation in high-dimensional functional regressions \cdot Submitted (2022+)
- 6. Boschi, T.*, Di Iorio, J.*, Testa, L.*, Cremona, M. A., Chiaromonte, F. · Contrasting pre-vaccine COVID-19 waves in Italy through Functional Data Analysis · In submission (2022+)
- 7. Gortan, M., Testa, L., Fagiolo, G., Lamperti, F. · A unified repository for pre-processed climate data weighted by regionally-based economic activity · In submission (2022+)
- 8. Testa, L., Chiaromonte, F., Mina, A. · The DNA of science: network analysis of publications in genomics · Sant'Anna Colloquium Paper (2021)

VISITING PERIODS

Visiting Scholar

2021

Penn State University, United States

Visiting Scholar, Department of Statistics, Eberly College of Science, The Pennsylvania State University

Erasmus Program

2019

University of Galway, Ireland

Exchange student, Department of Business and Economics, University of Galway

High School Exchange Program 2016

Urrbrae High School, South Australia

Exchange student for one academic semester · Recognition of "academic excellence"

SUMMER SCHOOLS

Machine Learning Summer School 2021

University of Genova, Italy

Summer School in "Regularization Methods for Machine Learning", hosted by MaLGa (Machine Learning Centre of the University of Genova) in partnership with MIT

Economic Networks Summer School

2020

University of Oxford, United Kingdom

Summer School in "Economic Networks", hosted by the Mathematical Institute and the Institute for New Economic Thinking, University of Oxford

Data Science Summer School 2019

Data Science Summer School, Italy

EXPERIENCE

2022 Research Assistant

The Climate Repository Project · Sant'Anna School of Advanced Studies, Italy

Teaching Assistant

- \rightarrow 2022 · "Statistics" (undergraduate level) · Department of Economics, University of Pisa, Italy
- ightarrow 2022 · "Applied Statistics" (undergraduate level) · Sant'Anna School of Advanced Studies, Italy
- → 2021 · "Macroeconomics" (undergraduate level) · Department of Economics, University of Pisa, Italy

2020–2021 Data Analyst

Tuscany Regional Medical Service, USL Toscana Nord-Ovest, Italy · Analysis of COVID-19 textual data

TALKS & POSTERS

March 2023 (exp.) · Surprises in feature selection via linear interpolators · Sant'Anna School of Advanced Studies, Italy · Dissertation

December 2022 (exp.) · FAStEN: efficient feature selection and estimation in functional regressions · IMS International Conference on Statistics and Data Science (ICSDS), Florence, Italy · Poster

 $July\ 2022$ · Functional feature selection in function-on-function regression models · University of Pisa, Italy · Dissertation

April 2022 · Trajectories towards success: characterizing venture capital investment networks · ICHEC Brussels Management School, Belgium · Invited talk

December 2021 · An evolving science: network perspectives from genomics · Sant'Anna School of Advanced Studies, Italy · Dissertation

 $\it May 2019$ · Fiscal expansion versus consolidation · Sant'Anna School of Advanced Studies, Italy · Dissertation

May 2018 · PageRank, explained · Sant'Anna School of Advanced Studies, Italy · Dissertation

OTHER INFORMATION

Programming Languages AMPL + C + Julia + LATEX + Python + R + SQL

Spoken Languages

Italian (Native) · English (TOEFL score 108/120: CEFR C1) · Spanish (exp. B1) · French (exp. B1)

Memberships

American Statistical Association \cdot Institute of Mathematical Statistics \cdot Royal Statistical Society

Service

- ightarrow 2020–2022 · Honors students' representative in the Board of the Social Sciences academic class · Sant'Anna School of Advanced Studies
- \rightarrow 2020–2021 · Member of honors students' financial statement Committee · Sant'Anna School of Advanced Studies
- $ightarrow 2018-2020 \cdot$ Member of honors students' public relations Committee \cdot Sant'Anna School of Advanced Studies