CV Luca Coraggio

Work

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CURRENT POSITION

2022--.	Research fellow @ CSEF (Centre for Studies in Economics and Finance, Dept. of Economics and Statistics, University of Naples Federico II)
2020--.	Postdoctoral researcher @ DiSES Unina (Dept. of Economics and Statistics, University of Naples Federico II)

PAST POSITIONS

04/2024--07/2024	Visiting research @ Institute of Basic Medical Sciences, University of Oslo, Norway. (Statistical models for high-dimensional and functional data)
2020	Research assistant @ EIEF (Istituto Einaudi per l'Economia e la Finanza) Project: *Machine Learning Estimation of Job-Worker Matches based on Swedish Administrative data.* Resp. Prof. Marco Pagano
2020	Research assistant @ DiSES Unina (Dept. of Economics and Statistics, University of Naples Federico II) PRIN 2015 *The old age risk*. Scientific head: Prof. Tullio Jappelli.
09/2015--05/2016	Research assistant for the ERC project "*Finance and Labor*" (FINLAB) coordinated by Professor Marco Pagano at CSEF, University of Naples Federico II.
09/2015--12/2015	Internship @ *InnoAid* (role: research assistant) Project: *Street Food Project – Kolkata* Project in Development Economics, Kolkata, West Bengal, India.

EDUCATION

2016--2020	PhD in Economics (XXXII ciclo), University of Naples Federico II Thesis: *Machine Learning Methods and Applications in Economics*

2017--2018	Visiting Student @ ETH Zurich, Swiss Federal Institute of Technology
2014--2016	M.A. in Economics and Finance (LMEF), University of Naples Federico II 110/110 cum laude
2011--2014	B.A. in Economics, University of Naples Federico II 110/110 cum laude

PUBLICATIONS & WORKING PAPERS

2023
- Coraggio, L., and Coretto, Empyrical Analysis of the Quadratic Scoring for Selecting Clustering Solutions. In: Coretto P., Giordano G., La Rocca M. Parrella M. L., Rampichini C. (eds.) (2023) Book of Abstracts and Short Papers, 14th Scientific Meeting of the Classification and Data Analysis Group (CLADAG), Salerno, Sep. 11-13.
- Coraggio, L., and Coretto, P., Quadratic discriminant scoring for selecting clustering solutions. In: Bucci A., Cartone A., Evangelista A., Marletta A. Statistical Methods for Evaluation and Quality: Techniques, Technologies and Trends (T3). 11th Scientific Meeting of the SIS Group.
- Coraggio, L., and Coretto, P., *Selecting the number of clusters, clustering models, and algorithms. A unifying approach based on the quadratic discriminant score*, Journal of Multivariate Analysis (vol. 196, p. 105181).

2022
- Coraggio L., Pagano M., Scognamiglio A. and Tåg J. *JAQ of All Trades: Job Mismatch, Firm Productivity and Managerial Quality*. (SSRN Working paper)

2021
- Coraggio L. and Coretto, P. *In-sample and cross-validated likelihood-type criteria for clustering selection* In: Ingrassia S., Punzo A., Rocci R. (2021). Book of Short Papers of the 5th international workshop on Models and Learning for Clustering and Classification.
- Silvestre A., Basilicata P., Coraggio L., Guadagni R., Simonelli A. and Pieri M. *Illicit drugs seizures in 2013–2018 and characteristics of the illicit market within the Neapolitan area* Forensic Science International (vol. 321)

2019
- Coraggio, L. and Coretto, P. *Likelihood-type methods for comparing clustering solutions* In: CLADAG 12-th Scientific Meeting Books of Abstracts. Edizioni Università di Cassino. ISBN: 978-88-8317-108-6

TALKS

2023 ▶ *Empyrical Analysis of the Quadratic Scoring for Selecting Clustering Solutions* @ CLADAG 2023, 14th Scientific Meeting of the Classification and Data Analysis Group. Salerno. 11/09-13/09.

▶ (Invited talk) *Quadratic discriminant scoring for selecting clustering solutions* @ IES2023, 11th Scientific Meeting of the SIS Group. Pescara. 30/08-01/09.

▶ (Invited talk) *Selecting The Number Of Clusters, Clustering Models, and Algorithms. A Unifying Approach Based on the Quadratic Discriminant Score* @ youngF2stat, University of Naples Federico II, Italy. 19/10

▶ *JAQ of All Trades: Job Mismatch and Firm Productivity* @ Economics of Firms & Labor 2023. LMU Munich. 30/06-02/07

2022 ▶ *JAQ of All Trades: Job Mismatch and Firm Productivity* @ EEA-ESEM Congress. Bocconi University of Milan, Italy. 22-26/08

▶ *JAQ of All Trades: Job Mismatch and Firm Productivity* @ World Finance Conference, University of Turin, Italy. 1-3/08

2021 ▶ (Invited talk) *Selecting clustering algorithms and solutions via quadratic scoring* @ 14th International Conference of the ERCIM WG on Computational and Methodological Statistics and 15th International Conference on Computational and Financial Econometrics. 18/12

▶ *JAQ of all trades - Job Mismatch and Firm Productivity* @ European Winter Meeting - Econometric Society (EWMES). Macroeconomics session. 14/12

2020 ▶ *In-sample and cross-validated likelihood-type criteria for clustering selection* @ MBC2 Workshop on Models and Learning for Clustering and Classification. Dipartimento di Economia e Impresa Università di Catania, Italy. 04/09

2019 ▶ (Invited talk) *Likelihood-type methods for comparing clustering solutions* @ CLADAG 12-th Scientific Meeting. Cassino, 11-13/09

SOFTWARE & OTHERS

R packages ▶ [RSC: Robust and Sparse Correlation Matrix. V2.0.4](). R package (CRAN). Performs robust and sparse correlation matrix estimation.

2022 ▶ Tåg J., Pagano M., Scognamiglio A., and Coraggio L. *[The matching between workers and jobs explains productivity differentials across firms.]()* Vox Eu column. 9 May 2022.

TEACHING

Courses	▶ [Tools for Data Analysis](#) MOOC course, hosted on [Federica Web Learning](#). Part of the [Labor, Development & Policy evaluation](#) program.
	▶ Laboratorio di Python (Bachelor). University of Naples Federico II AA: 21/22 22/23
Teaching Assistant	▶ Fiancial Econometrics (MSc). UCL School of Management. Prof Toru Kitagawa and Prof Rui Silva. AA 20/21
	▶ Time Series Analysis and Forecasting (MSc). UCL School of Management. Prof Saleem Bahaj and Prof Andrea Carriero. AA 20/21
	▶ Econometrics (Graduate). University of Naples Federico II, DISES, MEF. Prof Pietro Coretto. AA: 17/18 18/19 19/20
	▶ Market Microstructure (Graduate). University of Naples Federico II, DISES, MEF. Prof Marco Pagano. AA: 17/18 18/19 19/20 20/21 21/22
	▶ Advanced Macroeconomics (Graduate). University of Naples Federico II, DISES, MEF. Prof Tullio Jappelli. AA: 19/20 20/21 21/22 22/23
	▶ Macroeconomics (Bachelor). University of Naples Federico II, DISES. Prof Tullio Jappelli and Prof Saverio Simonelli. AA: 20/21 21/22 22/23

AWARDS AND FUNDING

2017--2020	Scholarship – PhD in Economics, University of Naples Federico II
2017	Winning group of internal competition in data analysis by Summer School on Clustering and Classification (University of Bologna, CLADAG, SIS).
2015--2016	*Best Academic Performance,* during the second year of M.A. in Economics and Finance.
2015	Selected for the SMI Summer School, selection is based on merits and grants fully funded program.
2014--2015	*Best Academic Performance,* during the first year of M.A. in Economics and Finance.
2017--2020	Scholarship – PhD in Economics, University of Naples Federico II

SKILLS

Languages	▶ Italian mother tongue (C2) ▶ English full professional proficiency (C2)
Coding	C – Fortran (2018 Standard) – Matlab – Python – Posix Shell – R – STATA
OS	OpenBSD – Linux – Windows
Other tools	▶ Audio/Video editing OBS – Blender – Gimp – Inkscape ▶ Versioning Git ▶ Office LibreOffice – MSOffice ▶ Markup Languages LaTeX – HTML – Markdown ▶ Other Unix core utilities – Amazon AWS

ADDITIONAL EDUCATION & CERTIFICATIONS

2022 (11-15/07)	Textual analysis and Machine Learning with Applications to Economics and Finance. Società Italiana di Econometria (SidE). Perugia, Italy.
2022 (2-5/05)	Robust Statistics: Foundations and Recent Developments. III International School on Classification and Data Analysis under the auspices of ClaDAG. SIS. Como, Italy.
2021 (28/6–2/7)	Genoa Summer School on Causal Machine Learning.
2021	SQL for Data Science. UCDavis, via Coursera.
09/2020	MBC2 – Workshop on Model and Learning in Clustering and Classification. Dipartimento di Economia e Impresa, Università di Catania (Italy).
2020	Version Control with Git. Atlassian, via Coursera.
2019 (2-6/09)	Machine Learning Tools for Economists. CEMFI Summer School (Madrid, Spain).
2019 (26-30/08)	Machine Learning in Credit Markets. CEMFI Summer School (Madrid, Spain).
2019 (1-6/07)	Advanced Panel Econometrics: Theory and Application. Postgraduate Course in Econometrics. Italian Econometric Society.
2019 (20-27/01)	Neural Networks and Deep Learning; Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization; Structuring Machine Learning Projects. *Deeplearning.ai* specilization via Coursera.
2018 (5-7/09)	MBC2 – Workshop on Model-Based Clustering and Classification. Dipartimento di Economia e Impresa, Università di Catania (Italy).

2018 (2-6/07)	Barcelona Graduate School of Economics: Summer School in Bayesian Machine Learning and Social Sciences.
2018 (6-8/06)	Workshop: Fortran Modernization for Scientific Applications. University of Zurich, Department of Chemistry C.
2017 (22-26/05)	Summer School on Clustering and Classification. Univerisity of Bologna, Department of Statistical Sciences. CLADAG. SIS.
2017 (27-31/03)	Software Engineering and Parallel Programming in Modern Fortran. Cranfield University.
2017 (7-20/02)	Programming with Python for Data Science. By Microsoft on edX.
2016 (17-27/11)	Introduction to Python for Data Science. By Microsoft on edX.
2016 (6-17/06)	Machine Learning by Stanford University on Coursera.
2016 (21-22/01)	International Workshop, *SMART Stochastic Models And Related Topics,* Department of Mathematics, University of Salerno (Italy).
2015 (27-28/07)	Summer School, *SMI Interuniversity Mathematics Summer School,* Perugia (Italy). Courses: Mathematical Statistics, Functional Analysis.