

# CV Luca Coraggio

November 2023

## Work



Dept. Economics and Statistics,  
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## Current Position

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

## 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, 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 ▶ (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

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2021	<ul style="list-style-type: none"><li>▶ (Invited talk) <i>Selecting clustering algorithms and solutions via quadratic scoring</i> @ 14th International Conference of the ERCIM WG on Computational and Methodological Statistics and 15th International Conference on Computational and Financial Econometrics. 18/12</li><li>▶ <i>JAQ of all trades - Job Mismatch and Firm Productivity</i> @ European Winter Meeting - Econometric Society (EWMES). Macroeconomics session. 14/12</li></ul>
2020	<ul style="list-style-type: none"><li>▶ <i>In-sample and cross-validated likelihood-type criteria for clustering selection</i> @ MBC2 Workshop on Models and Learning for Clustering and Classification. Dipartimento di Economia e Impresa Università di Catania, Italy. 04/09</li></ul>
2019	<ul style="list-style-type: none"><li>▶ (Invited talk) <i>Likelihood-type methods for comparing clustering solutions</i> @ CLADAG 12-th Scientific Meeting. Cassino, 11-13/09</li></ul>

## Software & others

R packages	<ul style="list-style-type: none"><li>▶ <a href="#">RSC: Robust and Sparse Correlation Matrix. V2.0.4</a>. R package (CRAN). Performs robust and sparse correlation matrix estimation.</li></ul>
2022	<ul style="list-style-type: none"><li>▶ Tåg J., Pagano M., Scognamiglio A., and Coraggio L. <a href="#">The matching between workers and jobs explains productivity differentials across firms</a>. Vox Eu column. 9 May 2022.</li></ul>

## Teaching

Courses	<ul style="list-style-type: none"><li>▶ <a href="#">Tools for Data Analysis</a> MOOC course, hosted on <a href="#">Federica Web Learning</a>. Part of the <a href="#">Labor, Development &amp; Policy evaluation</a> program.</li><li>▶ Laboratorio di Python (Bachelor). University of Naples Federico II AA: 21/22 22/23</li></ul>
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<b>Teaching Assistant</b>	<ul style="list-style-type: none"><li>▶ Financial Econometrics (MSc). UCL School of Management. Prof Toru Kitagawa and Prof Rui Silva. AA 20/21</li><li>▶ Time Series Analysis and Forecasting (MSc). UCL School of Management. Prof Saleem Bahaj and Prof Andrea Carriero. AA 20/21</li><li>▶ Econometrics (Graduate). University of Naples Federico II, DISES, MEF. Prof Pietro Coretto. AA: 17/18 18/19 19/20</li><li>▶ Market Microstructure (Graduate). University of Naples Federico II, DISES, MEF. Prof Marco Pagano. AA: 17/18 18/19 19/20 20/21 21/22</li><li>▶ Advanced Macroeconomics (Graduate). University of Naples Federico II, DISES, MEF. Prof Tullio Jappelli. AA: 19/20 20/21 21/22 22/23</li><li>▶ Macroeconomics (Bachelor). University of Naples Federico II, DISES. Prof Tullio Jappelli and Prof Saverio Simonelli. AA: 20/21 21/22 22/23</li></ul>
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## 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	<i>Best Academic Performance</i> , 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	<i>Best Academic Performance</i> , during the first year of M.A. in Economics and Finance.

## Past Work Experience

2020	Research assistant @ EIEF (Istituto Einaudi per l'Economia e la Finanza) Project: <i>Machine Learning Estimation of Job-Worker Matches based on Swedish Administrative data</i> . Resp. Prof. Marco Pagano
2020	Research assistant @ DiSES Unina (Dept. of Economics and Statistics, University of Naples Federico II) PRIN 2015 <i>The old age risk</i> . Scientific head: Prof. Tullio Jappelli.

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09/2015– 05/2016	Research assistant for the ERC project “ <i>Finance and Labor</i> ” (FINLAB) coordinated by Professor Marco Pagano at CSEF, University of Naples Federico II.
09/2015– 12/2015	Internship @ <i>InnoAid</i> (role: research assistant) Project: <i>Street Food Project – Kolkata</i> Project in Development Economics, Kolkata, West Bengal, India.

## Skills

<b>Languages</b>	▶ Italian      mother tongue (C2)
	▶ English      full professional proficiency (C2)
<b>Coding</b>	C – Fortran (2018 Standard) – Matlab – Python – Posix Shell – R – STATA
<b>OS</b>	Linux – Windows
<b>Other tools</b>	▶ 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).

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- 2019 Machine Learning in Credit Markets. CEMFI Summer School (Madrid, Spain).  
(26-30/08)
- 2019 Advanced Panel Econometrics: Theory and Application. Postgraduate Course in Econometrics. Italian  
(1-6/07) Econometric Society.
- 2019 Neural Networks and Deep Learning; Improving Deep Neural Networks: Hyperparameter tuning,  
(20-27/01) Regularization and Optimization; Structuring Machine Learning Projects. *Deeplearning.ai* specialization  
via Coursera.
- 2018 MBC2 – Workshop on Model-Based Clustering and Classification. Dipartimento di Economia e Impresa,  
(5-7/09) Università di Catania (Italy).
- 2018 Barcelona Graduate School of Economics: Summer School in Bayesian Machine Learning and Social  
(2-6/07) Sciences.
- 2018 Workshop: Fortran Modernization for Scientific Applications. University of Zurich, Department of  
(6-8/06) Chemistry C.
- 2017 Summer School on Clustering and Classification. University of Bologna, Department of Statistical  
(22-26/05) Sciences. CLADAG. SIS.
- 2017 Software Engineering and Parallel Programming in Modern Fortran. Cranfield University.  
(27-31/03)
- 2017 Programming with Python for Data Science. By Microsoft on edX.  
(7-20/02)
- 2016 Introduction to Python for Data Science. By Microsoft on edX.  
(17-27/11)
- 2016 Machine Learning by Stanford University on Coursera.  
(6-17/06)
- 2016 International Workshop, *SMART Stochastic Models And Related Topics*, Department of Mathematics,  
(21-22/01) University of Salerno (Italy).
- 2015 Summer School, *SMI Interuniversity Mathematics Summer School*, Perugia (Italy). Courses: Mathematical  
(27-28/07) Statistics, Functional Analysis.