

Raffaella Piccarreta

ASSOCIATE PROFESSOR

Business Data Analytics

RAFFAELLA.PICCARETA@UNIBOCCONI.IT

Biography

Raffaella Piccarreta is an Associate Professor of Statistics at Università Bocconi. She is a fellow of Dondena (Centre for Research on Social Dynamics and Public Policy), of BIDS (Bocconi Institute for Data Science and Analytics) and of the CovidCrisis Lab (Laboratory for Coronavirus Crisis Research). She is a member of the SIS (Italian Statistics Society) and of SAA (Sequence Analysis Association), and one of the members of the Executive Committee of SAA.

Her work focuses on data analysis. Most of her research relates to the study of life course trajectories and events. She has a specific interest for Sequence Analysis, a technique aimed at identifying patterns in categorical longitudinal data, as well as for all the approaches to deal with this type of data. She coauthored a number of papers focused on different data. In particular, recently she worked on data on COVID-19. She is the author of numerous articles on her topics of interest. Her works have been published in the *Epidemiology Journal*, *Studies in Classification, Data Analysis and Knowledge Organization* and *Studies in Classification, Data Analysis and Knowledge Organization*, among others.

She has a Degree in Economics and Social Sciences (DES) from Università Bocconi and a Phd in Statistics from University of Trento.

ARTICLES IN SCHOLARLY JOURNALS

LIAO T. F., BOLANO D., BRZINSKY-FAY C., CORNWELL B., FASANG A. E., HELSKE S., PICCARRETA R., RAAB M., RITSCHARD G., STRUFFOLINO E., STUDER M.

Sequence analysis: Its past, present, and future

Social Science Research, 2022, vol.107, pp.102772

MENCARINI L., PICCARRETA R., LE MOGLIE M.

Life-course perspective on personality traits and fertility with sequence analysis

Journal of the Royal Statistical Society. Series A - Statistics in Society, 2022, vol.185, no. 3, pp.1344-1369

WADE S., PICCARRETA R., CREMASCHI A., ANTONIANO-VILLALOBOS I.

Colombian Women's Life Patterns: A Multivariate Density Regression Approach

Bayesian Analysis, 2022, vol.17, no. 2, pp.405 - 433

TRENTINI F., MARZIANO V., GUZZETTA G., TIRANI M., CEREDA D., POLETTI P., PICCARRETA R., BARONE A., PREZIOSI G., ARDUINI F., DELLA VALLE P. G., ZANELLA A., GROSSO F., DEL CASTILLO G., CASTROFINO A., GRASSELLI G., MELEGARO A., PIATTI A., ANDREASSI A., GRAMEGNA M., AJELLI M., MERLER S.

Pressure on the Health-Care System and Intensive Care Utilization During the COVID-19 Outbreak in the Lombardy Region of Italy: A Retrospective Observational Study in 43,538 Hospitalized Patients

American Journal of Epidemiology, 2022, vol.191, no. 1, pp.137-146

ZARDINI A., GALLI M., TIRANI M., CEREDA D., MANICA M., TRENTINI F., GUZZETTA G., MARZIANO V., PICCARRETA R., MELEGARO A., AJELLI M., POLETTI P., MERLER S.

A quantitative assessment of epidemiological parameters required to investigate COVID-19 burden

Epidemics, December, 2021, vol.37, pp.100530

CEREDA D., MANICA M., TIRANI M., ROVIDA F., DEMICHELI V., AJELLI M., POLETTI P., TRENTINI F., GUZZETTA G., MARZIANO V., PICCARRETA R., BARONE A., MAGONI M., DEANDREA S., DIURNO G., LOMBARDO M., FACCINI M., PAN A., BRUNO R., PARIANI E., GRASSELLI G., PIATTI A., GRAMEGNA M., BALDANTI F., MELEGARO A., MERLER S.

The early phase of the COVID-19 epidemic in Lombardy, Italy

Epidemics, December, 2021, vol.37, pp.100528

MURPHY K., MURPHY T. B., PICCARRETA R., GORMLEY I. C.

Clustering longitudinal life-course sequences using mixtures of exponential-distance models

Journal of the Royal Statistical Society. Series A – Statistics in Society, 2021, vol.184, no. 4, pp.1414-1451

POLETTI P., TIRANI M., CEREDA D., GUZZETTA G., TRENTINI F., MARZIANO V., TOSO C., PIATTI A., PICCARRETA R., MELEGARO A., ANDREASSI A., GRAMEGNA M., AJELLI M., MERLER S.

Seroprevalence of and Risk Factors Associated With SARS-CoV-2 Infection in Health Care Workers During the Early COVID-19 Pandemic in Italy

JAMA Network Open, 2021, vol.4, no. 7

POLETTI P., TIRANI M., CEREDA D., TRENTINI F., GUZZETTA G., MARZIANO V., SABATINO G., CASTROFINO A., GROSSO F., DEL CASTILLO G., PICCARRETA R., ANDREASSI A., MELEGARO A., GRAMEGNA M., AJELLI M., MERLER S., ATS LOMBARDY COVID-19 TASK FORCE

Association of Age With Likelihood of Developing Symptoms and Critical Disease Among Close Contacts Exposed to Patients With Confirmed SARS-CoV-2 Infection in Italy

JAMA Network Open, 2021, vol.4, no. 3, pp.1-10

VENTURINI S., PICCARRETA R.

A Bayesian Approach for Model-Based Clustering of Several Binary Dissimilarity Matrices: The Package in

Journal of Statistical Software, 2021, vol.100, no. 16, pp.1-35

POLETTI P., TIRANI M., CEREDA D., TRENTINI F., GUZZETTA G., MARZIANO V., BUORO S., RIBOLI S., CROTTOGINI L., PICCARRETA R., PIATTI A., GRASSELLI G., MELEGARO A., GRAMEGNA M., AJELLI M., MERLER S.

Age-specific SARS-CoV-2 infection fatality ratio and associated risk factors, Italy, February to April 2020

Eurosurveillance, 2020, vol.25, no. 31, pp.2001383

PICCARRETA R., STUDER M.

Holistic analysis of the life course: Methodological challenges and new perspectives

Advances in Life Course Research, September, 2019, vol.41, pp.100251

MACCHERONI C., PICCARRETA R.

Households' changing structure and consumption: the effect of the economic crisis during the period 2008-2013

Rivista di Statistica Ufficiale, 2018, vol.2-3, pp.37-76

PICCARRETA R.

Joint Sequence Analysis

Sociological Methods & Research, 2017, vol.46, no. 2, pp.252-287

VANTI C., CONTI C., FARESin F., FERRARI S., PICCARRETA R.

The Relationship Between Clinical Instability and Endurance Tests, Pain, and Disability in Nonspecific Low

Back Pain

Journal of Manipulative and Physiological Therapeutics, 2016, vol.39, no. 5, pp.359-368

DEL FAVA E., PICCARRETA R., GREGSON S., MELEGARO A., ANGLEWICZ P.

Transition to Parenthood and HIV Infection in Rural Zimbabwe

Plos One, 2016, vol.11, no. 9

VANTI C., MONTICONE M., CERON D., BONETTI F., PICCARRETA R., GUCCIONE A. A., PILLASTRINI P.

Italian Version of the Physical Therapy Patient Satisfaction Questionnaire: Cross-Cultural Adaptation and Psychometric Properties

Physical Therapy, 2013, vol.93, no. 7, pp.911-922

BONETTI M., PICCARRETA R., SALFORD G.

Parametric and Nonparametric Analysis of Life Courses: An Application to Family Formation Patterns

Demography, 2013, vol.50, no. 3, pp.881-902

PICCARRETA R.

Graphical and Smoothing Techniques for Sequence Analysis

Sociological Methods & Research, 2012, vol.41, no. 2, pp.362-380

SALVATO C., MINICHILLI A., PICCARRETA R.

Faster Route to the CEO Suite: Nepotism or Managerial Proficiency?

Family Business Review, 2012, vol.25, no. 2, pp.206-224

PICCARRETA R.

Binary trees for dissimilarity data

Computational Statistics & Data Analysis, 2010, vol.54, no. 6, pp.1516-1524

PICCARRETA R., LIOR O.

Exploring sequences: a graphical tool based on multi-dimensional scaling

Journal of the Royal Statistical Society. Series A - Statistics in Society, 2010, vol.173, no. 1, pp.165-184

PICCARRETA R.

Classification trees for ordinal variables

Computational Statistics, 2008, vol.23, no. 3, pp.407-427

PICCARRETA R., BILLARI F. C.

Clustering work and family trajectories by using a divisive algorithm

Journal of the Royal Statistical Society. Series A - Statistics in Society, 2007, vol.170, no. 4, pp.1061-1078

AASSVE A., BILLARI F. C., PICCARRETA R.

Strings of Adulthood: A Sequence Analysis of Young British Women's Work-Family Trajectories

European Journal of Population - Revue Européenne de Démographie, 2007, vol.23, no. 3-4, pp.369-388

BILLARI F. C., PICCARRETA R.

Analyzing Demographic Life Courses through Sequence Analysis

Mathematical Population Studies, 2005, vol.12, no. 2, pp.81-106

PICCARRETA R.

A new measure of nominal-ordinal association

Journal of Applied Statistics, 2001, vol.28, no. 1, pp.107-120

BORRONI C. G., PICCARRETA R.

Genetic algorithms for the analysis of Bayesian hierarchical partition models

Statistical Methods and Applications, 2001, vol.10, no. 1-3, pp.113-121

BORRONI C., PICCARRETA R.

Genetic Algorithms for Optimal Grouping of Categories in Two-way contingency Tables

Statistica Applicata, 2000, vol.12, pp.435-444

PICCARRETA R.

Sharp bounds for the maximum of the Goodman-Kruskal t index in a class of $I \times J$ tables with given row

and column totals

Computational Statistics, 1999, vol.14, no. 3, pp.397-418

TEXTBOOKS

PICCARRETA R., MEZZETTI M.

Statistica Descrittiva: Esercizi risolti e guida alla soluzione usando Excel

Egea, Milano, Italy, 2002

PICCARRETA R., VERONESE P.

Lezioni di inferenza statistica

Schönenfeld & Ziegler, Italy, 2001

MOLTENI L., PICCARRETA R.

Note di statistica descrittiva

Egea, Milano, Italy, 2001

CONTRIBUTION TO CHAPTERS, BOOKS OR RESEARCH MONOGRAPHS

PICCARRETA R., ELZINGA C. H.

Mining for Association between life courses in *Contemporary Issues in Exploratory Data Mining in the Behavioral Sciences (Quantitative Methodology Series)*

J.J. McArdle, G. Ritschard (Eds), Routledge, Taylor and Francis Group, pp.190-220, 2013

DALPIAZ E., PICCARRETA R.

Reputazione e attrattività del Sistema Paese: l'Italia attraverso l'analisi della stampa anglosassone in

L'attrattività del sistema paese – Territori, Settori, Imprese

P. Dubini (Eds), Il Sole 24 Ore, pp.121-162, 2006

PICCARRETA R., BIANCHI E.

La metodologia di indagine in *L'attrattività del sistema paese – Profili territoriali e idealtipi per le imprese*

P. Dubini (Eds), Il Sole 24 Ore, pp.57-109, 2005

PICCARRETA R.

Ordinal classification trees based on impurity measures in *Advances in Multivariate Data Analysis*

Bock Hans-Hermann, Chiodi Marcello, Mineo Antonio (Ed), Springer, pp.39-51, 2004

AASSVE A., BILLARI F. C., PICCARRETA R.

Sequence Analysis of BHPS Life Courses Data in *New Developments in Classification and Data Analysis*

M. Vichi, P. Monari, S. Mignani, A. Montanari (Eds), Springer, pp.275-284, 2004

BILLARI F. C., PICCARRETA R.

Life Courses as Sequences: An Experiment in Clustering via Monothetic Divisive Algorithms in *Advances in Classification and Data Analysis*

S. Borra, R. Rocci, M. Vichi, M. Schader (Eds), Springer, pp.351-358, 2001

PICCARRETA R.

Stable clusters: a new approach for clustering binary variables in *Advances in Classification and Data Analysis*

S. Borra, R. Rocci, M. Vichi, M. Schader (Ed), Springer, pp.35-42, 2001

COMMENTS, DISCUSSIONS, REPLIES IN JOURNAL

PICCARRETA R.

Comment: Implying sequences using scores - some considerations

2015, Sociological Methodology

PROCEEDINGS/PRESENTATIONS

PICCARRETA R., STRUFFOLINO E.

Enhancing Fuzzy Clusters' Interpretation Through Visualization

Society for Longitudinal and Life-course Studies (SLLS) Conference, 25 - 27 September 2019, Potsdam, Germany

PICCARRETA R., STRUFFOLINO E.

Heuristics for Validation in Sequence Analysis

Society for Longitudinal and Life-course Studies (SLLS) Conference, 9-11 July 2018, Milano, Italy

VENTURINI S., PICCARRETA R., BONETTI M.

Clustering-based measurement of dependence

6th Scientific Meeting of the CLADAG of the Italian Statistical Society - 12-14 September 2007, Macerata, Italy

PICCARRETA R.

Grouping and Classifying using CART

5th Scientific Meeting of the CLADAG of the Italian Statistical Society - 6-8 June 2005, Parma, Italy

PICCARRETA R., BILLARI F. C.

Life Course Data: A prediction problem

5th Scientific Meeting of the CLADAG of the Italian Statistical Society - 6-8 June 2005, Parma, Italy

PICCARRETA R., BILLARI F. C.

Clustering Life Courses: A New Divisive Approach

Atti della XLII Riunione Scientifica della Società Italiana di Statistica - 9-11 June 2004, Bari, Italy

PICCARRETA R., BILLARI F. C.

Studying demographic life courses with sequence analysis

European Population Conference EPC - 26-30 August, 2003, Warsaw, Poland
