

# VICARI DONATELLA

## Short Curriculum Vitae

### CURRENT ACADEMIC POSITION

Associate Professor of Statistics, Department of Statistical Sciences – Sapienza University of Rome, Italy

Qualified as Full Professor of Statistics (Abilitazione nazionale a professore ordinario, ASN2016 Area 13/D1)

### CONTACT INFORMATION

Sapienza Università di Roma

Dipartimento di Scienze Statistiche

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### RESEARCH INTERESTS

Multivariate Analysis, Classification and Clustering, Model-based Clustering, Dimensionality Reduction Methodologies

### ACADEMIC EXPERIENCE

Visiting Professor at the Department of Engineering Management and Systems Engineering, George Washington University, Washington D.C. - USA (Proff. S. Kotz and R. van Dorp)

December 2003, July – September 2004, July – September 2005, June – July 2006 – July 2010 – July 2011.

Associate Professor of Statistics, Sapienza University of Rome, Italy – Department of Statistics, Probability and Applied Statistics 2001 - present

Assistant Professor of Statistics, Sapienza University of Rome, Italy – Department of Statistics, Probability and Applied Statistics 1992 - 2001

Member of the Technical Staff at Computer Lab, Sapienza University of Rome, Italy – Department of Statistics, Probability and Applied Statistics 1990 – 1992

Visiting Student at the Department of Statistics University of North Carolina at Chapel Hill, NC, USA August – September 1990

Università di Roma “La Sapienza”, Roma, ITALY

Dipartimento di Statistica, Probabilità e Statistiche Applicate

B.S., Statistics

May, 1989

## TEACHING EXPERIENCE

Statistical Software Lab (third-year undergraduate course)	2013 – present
Multivariate Statistics (third-year undergraduate course)	2003 – present
Multivariate Statistics Lab (graduated student course)	2002 – 2007
Statistics (first-year undergraduate course)	2001
Statistical Inference (second-year undergraduate course)	1996 – 1999
Data Analysis (second-year undergraduate course)	1999 – 2002

## ORGANIZATION OF LOCAL AND NATIONAL RESEARCH PROJECT (recent years)

- 2010 Member of the Research Project PRIN2008 (National PI M. Vichi) “New Multivariate Methods for Statistical Quality Assessment and Risk Analysis of services”.
- 2011 PI of the University Research Project “Joint classification modelling of consumers and products”.
- 2012 Member of the Research Project PRIN2010 (National PI P. Giudici) “Statistical Models for Risk Assessment”.
- 2014 PI of the University Research Project “Classification modelling of asymmetric proximity data in explorative and confirmative perspectives”.
- 2015 Member of the University Research Project “*Multimode Methods for Classification, Clustering and Dimensionality Reduction*” (PI M. Vichi).

## ORGANIZATION OF SCIENTIFIC EVENTS (recent years)

- 2010 Member of the Scientific Committee of the Conference of the Italian Statistical Society SIS2010, Padova, June 17-19, 2010.
- 2010 Member of the Scientific Committee of the Joint Meeting GfKI - CLADAG 2010, Firenze, September 8-10, 2010.
- 2012 Member of the Local Organizing Committee of the Conference of the Italian Statistical Society SIS2012, Roma, June 20-22, 2012.
- 20102 Chair the Scientific Committee of the Joint Meeting JCS - CLADAG 2012, Anacapri (Napoli), September 3-4, 2012.
- 2014 Member of the Scientific Committee of the *Conference of European Statistics Stakeholders – Methodologists, Producers and Users of European Statistics*, Roma, November 24-25, 2014.
- 2017 Member of the Awards Committee of the IFCS (International Federation of the Classification Societies) for the *IFCS 2017* Conference (August 8-10, 2017, Tokyo, Japan).

## OTHER APPOINTMENTS

- Member of the Collegio Docenti for the Ph.D. Programme in Statistical Science (Dept. of Statistical Science, Sapienza University, Rome, Italy) 2012 – present
- Member of the Collegio Docenti for the Ph.D. Programme in European PhD in Socio-Economic and Statistical Studies (Sapienza University, Rome, Italy) 2011 – 2014
- Member of the Italian Statistical Society (SIS) 1991 – present
- Member of the Italian Group of Classification and Data Analysis (CLADAG) 1999 – present
- Member of the Specialized Team on Mixture Models - ERCIM Working Group on Computational and Methodological Statistics 2007 – present
- Member of the Specialized Team on Multi-set and multi-way models - ERCIM Working Group on Computational and Methodological Statistics 2013 – present
- *Editorial Executive Panel of Statistical Methods and Applications Journal* 2004– 2013
- *Associate Editor of Behaviormetrika Journal* 2016 – present.
- Elected Member of the Scientific Council of the Italian Group of Classification and Data Analysis (CLADAG) 2009 – 2013

## SELECTED RECENT PUBLICATIONS

- KIERS, H.A.L., VICARI, D., VICHI M., Simultaneous Classification and Multidimensional Scaling with External Information, *Psychometrika*, 70, 3, 433-460, 2005.
- KOTZ, S., VICARI, D., Survey of Developments in the Theory of Continuous Skewed Distributions, *Metron*, LXIII, 2, 225-261, 2005.
- ALFO', M., NIEDDU, L., VICARI, D., Assessing Quality Using Routine Administrative Data: the Case of Preventable Hospitalizations, *Statistica e Applicazioni*, 3, 5-12, 2005.
- BOCCI, L., VICARI, D., VICHI, M., A Mixture Model for the Classification of Three-Way Proximity Data, *Computational Statistics and Data Analysis*, 50, 7, 1625-1654, 2006.
- ALFO', M., NIEDDU, L., VICARI, D., A finite mixture model for image segmentation, *Statistics and Computing*, 18, 137-150, 2008.
- VICARI, D., VAN DORP, J.R., KOTZ, S., Two-Sided Generalized Topp and Leone (TS-GTL) distributions, *Journal of Applied Statistics*, 10, 1115-1129, 2008.
- VICARI, D., VICHI M., Structural Classification Analysis of Three-Way Dissimilarity Data, *Journal of Classification*, 26, 121-154, 2009.
- ALFO', M., NIEDDU, L., VICARI, D., Finite Mixture Models for Mapping Spatially Dependent Disease Counts, *Biometrical Journal*, 1, 84-97, 2009.
- VICARI, D., ALFO', M., Clustering Discrete Choice Data, in: *Proceedings in Computational Statistics, COMPSTAT2010*, Lechevallier, Y., Saporta, G. (Eds.), Physica-Verlag, Heidelberg, 369-378, 2010.
- ALFO', M., NIEDDU, L., VICARI, D., Testing for dependence in mixed effect models for multivariate mixed responses, in: *"New Perspectives in Statistical Modeling and Data Analysis"*, S. Ingrassia, R. Rocci, M. Vichi (Eds.), series: *Studies in Classification, Data Analysis and Knowledge Organization*, Springer-Verlag, Heidelberg, 369-376, 2011.

- MERCURI, E., CASSETTA, M., CAVALLINI, C., VICARI, D., LEONARDI, R., BARBATO, E., Dental anomalies and clinical features in patients with maxillary canine impaction, *The Angle Orthodontist*, 83(1), 22-28, 2013.
- VICARI, D., Discussion on “How to find an appropriate clustering for mixed type variables with application to socio-economic stratification” by Christian Hennig and Tim Liao, *Journal of the Royal Stat. Soc. C*, 62, 359-360, 2013.
- VICARI, D., VICHI, M., On Multivariate Linear Regression for Heterogeneous Data, *Journal of Applied Statistics*, 40 (6), 1209-1230, 2013.
- VICARI, D., VAN DORP, J.R., On a bounded bimodal two-sided distribution fitted to the Old-Faithful Geyser Data, *Journal of Applied Statistics*, 40 (9), 1965-1978, 2013.
- MERCURI, E., CASSETTA, M., CAVALLINI, C., VICARI, D., LEONARDI, R., BARBATO, E., Skeletal features in patient affected by maxillary canine impaction, *Medicina Oral, Patologia Oral y Cirugia Bucal*, (DOI: 10.4317/medoral.18746), 18(4), 597-602, 2013.
- VICARI, D., ALFO', M., Model based clustering of customer choice data, *Comp. Stat. and Data Anal.*, 71, 3-13, 2014.
- VICARI, D., Classification of asymmetric proximity data, *Journal of Classification*, 31(3), 386-420, 2014.
- MARTELLA F., VICARI, D., VICHI M., Partitioning predictors in multivariate regression models, *Statistics and Computing*, 25(2), 261-272, 2015.
- BOCCI, L., VICARI, D., GINDCLUS: Generalized INDCLUS with external information, *Psychometrika*, 82, 355-381, 2017.
- SACCO, C., PERNA, S., VICARI, D., ALFO', M., BAUER, C., HOFFMAN, U., FORSTER, J., ZEPP, F., SCHUSTER, A., WAHN, U., KEIL, T., LAU, S. and MATRICARDI P., Growth curves of “normal” serum total IgE levels throughout childhood: a quantile analysis in a birth cohort, *Pediatric Allergy and Immunology*, 28 (6), 525-534, 2017.
- VIVO, J., FRANCO, M., VICARI, D., Rethinking an ROC partial area index for evaluating diagnostic performance at a high specificity range, *Advances in Data Analysis and Classification*, in press, 2017.
- VICARI, D., CLUSKEXT: CLUstering model for SKew-symmetric data including EXTERNAL information, *Advances in Data Analysis and Classification*, 12, 43-64, 2018 (published online April 2015).
- MARTELLA, F., VICARI, D., Regression modeling via latent predictors, *Book of Short Papers, SIS2018*, Palermo 20-22 Giugno 2018, 2018.
- BOCCI, L., VICARI, D., An INDCLUS-type model for occasion-specific complementary partitions, *Book of Short Papers, SIS2018*, Palermo 20-22 Giugno 2018, 2018.
- VICARI, D., OKADA, A., RAGOZINI, G., WEIHS, C. (Eds), *Analysis and Modeling of Complex Data in Behavioral and Social Sciences*, series: *Studies in Classification, Data Analysis and Knowledge Organization*, Springer-Verlag, Heidelberg, 2014 (ISBN 978-3-319-06691-2)

#### SUBMITTED PAPERS

- VICHI, M., VICARI, D., KIERS, H.A.L., Clustering and Dimensional Reduction for mixed variables, *Behaviormetrika*, minor revision, 2018.

- NIEDDU, L., VICARI, D., Supervised Nested Algorithm for Classification based on K-means, series: *Studies in Classification, Data Analysis and Knowledge Organization*, Springer-Verlag, Heidelberg, minor revision, 2018.