Antonio Irpino, Ph. D.

PERSONAL INFORMATION

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🌐 https://www.matfis.unicampania.it/dipartimento/docenti?MATRICOLA=058920

Sex Male | Date of birth 18 Nov 1972 | Nationality Italian

Main fields of teaching and research
- Data Analysis
- Data quality
- Datamining •
- Environmental statistics
- Supervised and Unsupervised classification
- Statistical software
- Data Analytics

- Symbolic Data Analysis
- Datastream Analysis
- Distributional data analysis
- Tourism Statistics
- Biostatistics
- Computational statistics
- Data Science

WORK EXPERIENCE

01/03/2024-today

Full Professor of Statistics
Università degli Studi della Campania "L. Vanvitelli", Caserta (Italy)
Dipartimento di Matematica e Fisica

01/11/2015- 29/02/2024

Associate Professor of Statistics
Università degli Studi della Campania "L. Vanvitelli", Caserta (Italy)
Dipartimento di Matematica e Fisica

02/02/2007–31/10/2015

Assistant professor and researcher of Statistics
Seconda Università degli Studi di Napoli, Caserta (Italy)

Other Professional activities

- Project leader for a survey of the degree of knowledge of the new Basel II accord among the SME of Regione Campania organized by Eurispes Campania and GA.FI. Sud: questionnaire design, survey and sampling design, data analysis and final report redaction (January-June 2006)

- since 2005 Consultant of AIR SpA (Regional public utility for transportation in Irpinia) for some market and QoS surveys:

- Customer satisfaction (Survey and sampling design and data analysis)

- Survey for the organization of the commercial spaces of the new Bus Station of Avellino (questionnaire design, survey and sampling design, data analysis)

- Origin-destination survey for students and workers of 12 towns of the area of Avellino (questionnaire design, survey and sampling design, data analysis).

- since 2006 Consultant at the section of Pharmacovigilance of the Department of Experimental Medicine, Faculty of Medicine, Second University of Naples. Tasks: survey and sampling design, data analysis, database design, under the supervision of Prof. Francesco Rossi and Amelia Filippelli.

EDUCATION AND TRAINING

1991-1997

M.Sc. in Economics and Business,

Replace with EQF
(or other) level if

Final grades : 110 Cum laude,
University "Federico II" of Naples
Degree of Doctor in Economics and Commerce
Dissertation: "Tecniche fattoriali per l'Analisi di Dati Simbolici" (Factorial tecniques for Symbolic Data Analysis),
Chair, Prof. N. C. Lauro.

1998-2001   Ph.D. in "Computational statistics and its applications" (XIII cycle)

Dept. of Mathematics and Statistics.
University "Federico II" of Naples
Dissertation: "Estrazione di conoscenza da oggetti descritti da variabili modali attraverso Reticoli di Galois" (in Italian), (Knowledge extraction from objects described by modal variables by means of Galois Lattices")
Chair, Prof. N. C. Lauro.

AWARDS

2019	National Academic Qualification as Full Professor in Statistics
2015	Successful candidate in an open competition as Associate Professor of Statistics at the Second University of Naples (Italy)
2014	National Academic Qualification as Associate Professor in Statistics
2004-2005	Fellowship in Information and Communication Technology
	Regional center of competence for ICT,
	University of Sannio, Benevento
2003-2004	Fellowship in Statistics
	Theme of research: "Classification techniques for symbolic data"
	Department of Business Strategies and quantitative methodologies
	Second University of Naples, Supervisor Prof. R. Verde
2002-2003	Post-doc grant in Statistics
	Theme of research: "Data Mining and symbolic data analysis"
	Department of Business Strategies and quantitative methodologies,
	Second University of Naples, Supervisor Prof. R. Verde
2001-2003	Fellowship grant in statistics (European research project ASSO),
	Department of Mathematics and Statistics
	University "Federico II" of Naples
	Under the supervision of Prof. Carlo N. Lauro

PERSONAL SKILLS

Mother tongue   Italian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Listening	Reading
B2	C2	B2	C2	B2
A2	A2	A2	A2	A1

inglese — B2 / C2 / B2 / C2 / B2
francese — A2 / A2 / A2 / A2 / A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Communication skills   good communication skills gained through my experience in teaching and participation as speaker at scientific conferences.
Specialist in statistical visualization and charting tools (both static and interactive) taught at a 9CFU course in "Advanced Data Analysis and Visualization" at the BC course in Data Analytics.

Organisational / managerial skills   Good leadership and management skills gained through the direction of research project and as member of scientific and organizing committee of several scientific conferences, workshops and symposia.

Job-related skills   REASON AND PROBLEM SOLVE

- Analyze ideas and use logic to determine their strengths and weaknesses.
- Understand new information or materials by studying and working with them.
- Combine several pieces of information and draw conclusions.
- Use reasoning to discover answers to problems.
- Recognize the nature of a problem.
- Judge the costs and benefits of a possible action.
- Notice when something is wrong or is likely to go wrong.
- Follow guidelines to arrange objects or actions in a certain order.
- Think of new ideas about a topic.
- Develop rules that group items in various ways.
- Think of original, unusual, or creative ways to solve problems.
- Recognize when important changes happen or are likely to happen in a system.
- Identify what must be changed to reach goals.

WORK WITH PEOPLE

- Teach others how to do something.
- Use several methods to learn or teach new things.
- Be aware of others' reactions and understand the possible causes.
- Change behavior in relation to others' actions.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Proficient user

Levels: Basic user - Independent user - Proficient user
Digital competences - Self-assessment grid

Operating Systems: Windows, Mac OS.
Software: Word, Excel, Access, Powerpoint, Front page, Dreamweaver, Photoshop, Internet Explorer, Outlook Express, Outlook, FileMaker.
Scientific Software: Rstudio, Python, Julia, SPSS, Statistica, R, S-plus, Matlab, NCSS,
Programming languages: R, Python, Julia, C, C++, Java, SQL
Software, languages and enviroments for web applications: Shiny, Jupiter notebooks, PHP, XML, HTML, JSP, ASP.

ADDITIONAL INFORMATION

Publications

In scientific journals

1. de Carvalho, F.A.T., Irpino, A., Verde, R., Balzanella, A. (2022). Batch Self-Organizing Maps for Distributional Data with an Automatic Weighting of Variables and Components. JOURNAL OF CLASSIFICATION, ISSN: 0176-4268, doi: 10.1007/s00357-022-09411-1
2. de Carvalho, F.A.T., Balzanella, A., Irpino, A., Verde, R. (2020). Co-clustering algorithms for distributional data with automated variable weighting. INFORMATION SCIENCES, ISSN: 0020-0255, doi: 10.1016/j.ins.2020.11.018
3. Antonio Balzanella, Antonio Irpino (2019). Spatial prediction and spatial dependence monitoring on georeferenced data streams. STATISTICAL METHODS & APPLICATIONS, ISSN: 1618-2510, doi: 10.1007/s10260-019-00462-0
4. IRPINO Antonio, VERDE Rosanna, DE CARVALHO Francisco de A.T. (2017). Fuzzy clustering of distributional data with automatic weighting of variable components. INFORMATION SCIENCES, vol. 406-407, p. 248-268, ISSN: 0020-0255, doi: 10.1016/j.ins.2017.04.040
5. Rosanna Verde, Antonio Irpino (2017). Multiple factor analysis of distributional data. STATISTICA APPLICATA, vol. 29, p. 305-330, ISSN: 1125-1964, doi: 10.26398/IJAS.0029-017
6. Irpino Antonio, Verde Rosanna, Balzanella Antonio (2016). Dimension Reduction Techniques for Distributional Symbolic Data. IEEE TRANSACTIONS ON CYBERNETICS, vol. 46, p. 344-355, ISSN: 2168-2267, doi: 10.1109/TCYB.2015.2389653
7. Irpino Antonio, Verde Rosanna (2015). Linear regression for numeric symbolic variables: a least squares approach based on Wasserstein Distance. ADVANCES IN DATA ANALYSIS AND CLASSIFICATION, vol. 9, p. 81-106, ISSN: 1862-5347, doi: 10.1007/s11634-015-0197-7

8. Verde R, Balzanella A, Irpino A (2015). Order statistics for histogram data and a box plot visualization tool. REVUE DES NOUVELLES TECHNOLOGIES DE L'INFORMATION, vol. RNTI-E-29, p. 29-48, ISSN: 1764-1667

9. Antonio Irpino, Rosanna Verde (2014). Basic statistics for distributional symbolic variables: a new metric-based approach. ADVANCES IN DATA ANALYSIS AND CLASSIFICATION, vol. 9, p. 143-175, ISSN: 1862-5347, doi: 10.1007/s11634-014-0176-4

10. VERDE R, IRPINO A, BALZANELLA A (2013). Clustering quantified ordinal data distributions. QUADERNI DI STATISTICA, vol. 15, p. 145-170, ISSN: 1594-3739

11. Rafaniello, C.; Lombardo, F.; Ferrajolo, C.; Sportiello, L.; Parretta, E.; Formica, R.; Potenza, S.; Rinaldi, B.; IRPINO, A.; Raschetti, R.; Vanacore, N.; Rossi, F. & Capuano, A. (2014), 'Predictors of mortality in atypical antipsychotic-treated community-dwelling elderly patients with behavioural and psychological symptoms of dementia: a prospective population-based cohort study from Italy', *EUROPEAN JOURNAL OF CLINICAL PHARMACOLOGY* **70**, 187--195.

12. Irpino, A.; Verde, R. & De Carvalho, F. (2014), 'Dynamic clustering of histogram data based on adaptive squared Wasserstein distances', *EXPERT SYSTEMS WITH APPLICATIONS* **41**, 3351--3366.

13. Guarracino, M.; Irpino, A.; Jasinevicius, R. & Verde, R. (2013), 'Fuzzy regularized generalized eigenvalue classifier with a novel membership function', *INFORMATION SCIENCES* **245**, 53--62.

14. Verde, R. & Irpino, A. (2013), 'Multiple Linear Regression for Histogram Data using Least Squares of Quantile Functions: a Two-components model.', *REVUE DES NOUVELLES TECHNOLOGIES DE L'INFORMATION* **RNTI-E-25**, 78--93.

15. Gallo, M.; Clavenna, A.; Bonati, M.; Siani, P.; Irpino, A.; Rossi, F. & Capuano, A. (2012), 'Active surveillance of adverse drug reactions in children in five Italian paediatric wards', *OPEN JOURNAL OF PEDIATRICS* **2**, 111--117.

16. Guarracino, M.; Irpino, A.; Radziukyniene, N. & Verde, R. (2012), 'Supervised Classification of Distributed Data Streams for Smart Grids', *ENERGY SYSTEMS* **3**, 95--108.

17. VERDE R, IRPINO A (2009). New Statistics For New Data: A Proposal For Comparing Multivalued Numerical Data. STATISTICA APPLICATA, p. 185-206, ISSN: 1125-1964

18. CAPUANO A, IRPINO A, GALLO M, FERRANTE L, ILLIANO ML, RINALDI B, FILIPPELLI A, ROSSI F (2009). Regional surveillance of emergency-department visits for outpatient adverse drug events. EUROPEAN JOURNAL OF CLINICAL PHARMACOLOGY, vol. 65, p. 721-728, ISSN: 0031-6970

19. VERDE R., IRPINO A. (2008). Dynamic clustering of interval data using a Wasserstein-based distance. PATTERN RECOGNITION LETTERS, vol. 29, p. 1648-1658, ISSN: 0167-8655, doi: 10.1016/j.patrec.2008.04.008

20. IRPINO A, ROMANO E (2007). Optimal histogram representation of large data sets: Fisher vs piecewise linear approximations. REVUE DES NOUVELLES TECHNOLOGIES DE L'INFORMATION, p. 99-110, ISSN: 1764-1667

21. IRPINO A, TONTODONATO V (2006). Clustering reduced interval data using Hausdorff distance. COMPUTATIONAL STATISTICS, vol. 21, p. 271-288, ISSN: 0943-4062

22. IRPINO A. (2006). "Spaghetti" PCA analysis: An extension of principal components analysis to time dependent interval data. PATTERN RECOGNITION LETTERS, vol. 27, p. 504-513, ISSN: 0167-8655, doi: 10.1016/j.patrec.2005.09.013

In Books

1. Ponti, A., Irpino, A., Candelieri, A., Bosio, A., Giordani, I., Archetti, F. (2023). Network Vulnerability Analysis in Wasserstein Spaces. In: Simos Dimitris E. et al., Learning and Intelligent Optimization. LECTURE NOTES IN COMPUTER SCIENCE, p. 263-277, Springer International Publishing, ISBN: 978-3-031-24866-5, ISSN: 1611-3349 https://doi.org/10.1007/978-3-031-24866-5_20

2. Barbieri, M.M., Bassi, F., Irpino, A., Verde, R. (2023). The Rating of Journals and the Research Outcomes in Statistical Sciences in Italian Universities. In: AA.VV.. (a cura di): Salvati Nicola and Perna Cira and Marchetti Stefano and Chambers Raymond, Studies in Theoretical and Applied Statistics. p. 487-511, Springer International Publishing, ISBN: 978-3-031-16609-9

3. Irpino, A., Verde, R. (2022). Descriptive Statistics for Numeric Distributional Data. In: Brito P. Dias S.. Analysis of Distributional Data. p. 57-80, Boca Raton:CRC Press, ISBN: 9781498725453

4. Verde, R., Irpino, A. (2022). Partitive and Hierarchical Clustering of Distributional Data using the Wasserstein Distance. In: Brito P. Dias S.. Analysis of Distributional Data. p. 105-126, Boca Raton:CRC Press, ISBN: 9781498725453

5. Irpino, A., Verde, R. (2022). Regression Analysis of Distributional Data Based on a Two-Component Model. In: Brito P. Dias S.. Analysis of Distributional Data. p. 319-338, Boca Raton:CRC Press, ISBN: 9781498725453

6. Romano, E., Irpino, A., Jorge, M. (2021). Spatial functional data analysis for probability density

functions: compositional functional data vs distributional data approach. In: Mateu Jorge Ramón Giraldo. Geostatistical Functional Data Analysis: Theory and Methods. Chichester, UK:John Wiley & Sons, ISBN: 978-1-119-38784-8 https://doi.org/10.1002/9781119387916.ch6

7. Rivoli, Lidia, VERDE, Rosanna, IRPINO, Antonio (2016). The median of a set of histogram data. In: G. Alleva A. Giommi. (a cura di): G. Alleva A. Giommi, Studies in Theoretical and Applied Statistics Selected Papers of the Statistical Societies. p. 37-48, Springer International Publishing Switzerland, ISBN: 978-3-319-27272-6, doi: 10.1007/978-3-319-27274-0_4

8. Casalino L, D'Ambra P, Guarracino MR, Irpino A, Maddalena L, Maiorano F, Minchiotti G, Patriarca EJ (2015). Image Analysis and Classification for High-Throughput Screening of Embryonic Stem Cells. In: Zazzu V.;Ferraro M.B.;Guarracino M.. (a cura di): Zazzu Ferraro Guarracino, Mathematical Models in Biology, Proceedings of the First Workshop on Bringing Maths To Life (BMTL 2014),. p. 17-31, BERLIN:Springer, ISBN: 978-3-319-23496-0, doi: 10.1007/978-3-319-23497-7_2

9. Verde Rosanna, Irpino Antonio, Rivoli Lidia (2014). A Box-Plot and Outliers Detection Proposal for Histogram Data: New Tools for Data Stream Analysis. In: AA.VV.. (a cura di): Vicari Donatella;Okada Akinori;Ragozini Giancarlo;Weihs Claus, Analysis and Modeling of Complex Data in Behavioral and Social Sciences. p. 283-291, BERLIN:Springer, ISBN: 978-3-319-06691-2, doi: 10.1007/978-3-319-06692-9_30

10. Irpino, A. & Verde, R. (2013), *Statistical Models for Data Analysis*, Springer, BERLIN – DEU, chapter A Metric Based Approach for the Least Square Regression of Multivariate Modal Symbolic Data, pp. 161--169.

11. Irpino, A.; Guarracino, M. & Verde, R. (2013), *Classification and Data Mining*, Springer, BERLIN – DEU, chapter Classification of Data Chunks Using Proximal Vector Machines and Singular Value Decomposition, pp. 55--62.

12. Irpino, A.; Verde, R. & De Carvalho, F. (2012), *Proceedings of COMPSTAT 2012*, ISI/IASC, chapter Batch self organizing maps for interval and histogram data, pp. 143--154.

13. Irpino, A. & Iacono, M. (2011), *Classification and Multivariate Analysis for Complex Data Structures*, Springer, BERLIN – DEU, chapter Improving the MHIST-p Algorithm for Multivariate Histograms of Continuous Data, pp. 155--164.

14. IRPINO A, VERDE R (2010). Clustering Linear Models Using Wasserstein Distance. In: (a cura di): Francesco Palumbo;Carlo Natale Lauro;Michael J. Greenacre, Data Analysis and Classification. p. 41-48, Berlin:Springer, ISBN: 978-3-642-03738-2, doi: 10.1007/978-3-642-03739-9_5

15. BALZANELLA Antonio, IRPINO Antonio, VERDE Rosanna (2010). Dimensionality reduction techniques for streaming time series: a new symbolic approach. In: LOCAREK-JUNGE HERMANN WEIHS CLAUS. (a cura di): Hermann Locarek-Junge;Claus Weihs, Classification as a Tool for Research. p. 381-390, BERLIN:Springer, ISBN: 978-3-642-10744-3, doi: 10.1007/978-3-642-10745-0_41

16. IRPINO A., VERDE R. (2010). Ordinary Least Squares for histogram data based on Wasserstein distance. In: Lechevallier Yves Saporta Gilbert. Proceedings of COMPSTAT'2010. p. 581-589, Physica Verlag, ISBN: 978-3-7908-2603-6

17. VERDE R, IRPINO A (2008). A New interval data distance based on Wasserstein metric. In: PREISACH C. BURKHARDT H. SCHMIDT-THIENE L. DECKER R.. Data Analysis, Machine Learning and Applications. p. 705-712, Berlin:Springer, ISBN: 978-3-540-78239-1

18. VERDE R, LAURO N.C, IRPINO A (2008). Factorial discriminant analysis on symbolic objects. In: M. NOIRHOMME E. DIDAY. Symbolic data analysis and the SODAS software. p. 341-358, Wiley, ISBN: 9780470018835

19. VERDE R, LAURO N.C, IRPINO A (2008). Generalized canonical analysis on symbolic objects. In: M. NOIRHOMME E. DIDAY. Symbolic data analysis and the SODAS software. p. 313-330, Wiley, ISBN: 9780470018835

20. LAURO N. C, IRPINO A, VERDE R (2008). Pincipal components analysis of symbolic data described by intervals. In: M. NOIRHOMME E. DIDAY. Symbolic data analysis and the SODAS software. p. 279-312, Wiley

21. IRPINO A, VERDE R (2007). Dynamic clustering of histogram data: using the right metric. In: BRITO P. BERTRAND P. CUCUMEL G. DE CARVALHO F.. Selected contributions in Data Analysis and Classification. vol. XIII, p. 123-134, Heidelberg:Springer, ISBN: 978-3-540-73558-8, doi: 10.1007/978-3-540-73560-1_12

22. VERDE R, IRPINO A (2006). A new Wasserstein based distance for hierarchical clustering of histogram symbolic data. In: (a cura di): Vladimir Batagelj;Hans-Hermann Bock;Anuška Ferligoj;Aleš Žiberna, Data Science and Classification. p. 185-192, Berlin:Springer, ISBN: 3-540-34415-2, doi: 10.1007/3-540-34416-0_20

23. IRPINO A, VERDE R, LECHEVALLIER Y (2006). Dynamic clustering of histograms using Wasserstein metric. In: RIZZI A. VICHI M.. COMPSTAT 2006 - Advances in computational statistics. p. 869-876, HEIDELBERG:Physica-Verlag, ISBN: 978-3-7908-1708-9

24.   IRPINO A., VERDE R (2004). Classificazione consenso di dati concettuali mediante reticoli di Galois. In: (a cura di): N.C. Lauro e C. Davino, Data mining e analisi simbolica. p. 81-123, Milano:FrancoAngeli, ISBN: 9788846457493

25.   IRPINO A, VERDE R, LAURO N. C (2003). Visualizing symbolic data by closed shapes. In: SHADER GAUL VICHI. Between Data Science and Applied Data Analysis. p. 244-251, Berlin:Springer, ISBN: 978-3540403548

26.   BRUZZESE D, IRPINO A (2001). Galois lattices of Modal Symbolic Objets. In: S.BORRA, R.ROCCI, M. VICHI, M. SHANDER. ADVANCES IN CLASSIFICATION AND DATA ANALYSIS. p. 3-10, BERLIN:Springer, ISBN: 978-3540414889

27.   BRUZZESE D, IRPINO A (2000). Un approccio fuzzy al controllo di coerenza nei questionari computer-assisted. In: CIVARDI FABBRIS. Valutazione della didattica con sistemi computer-assisted. p. 73-82, PADOVA:CLEUP, ISBN: 8871785266

In Proceedings

1.   [50]Diana, A., Romano, E. Irpino, A. (2023). A new topological weighted functional regression model to analyse wireless sensor data. In P. Cerchiello, A. Agosto, S. Osmetti, Proceedings of the Statistics and Data Science Conference. 27-28 Aprile 2023 ISBN: 978-88-6952-170-6, EGEA, Pavia, Italy.

2.   Diana, A., Romano, E. Irpino, A. (2022). Conformal Prediction for Geographically Weighted Functional Regression models: an application for environmental impact assessment. In: (a cura di): Lombardo, R. et al, Statistical and Economic Methodologies for Quality Assessment. p. 523-528, Milano:PKE - Professional Knowledge Empowerment s.r.l., ISBN: 978-88-94593-35-8, Dipartimento di Economia, Università degli Studi della Campania "L. Vanvitelli", 26-27 Gennaio 2022

3.   Diana, A., Romano, E. Irpino, A. (2022). Conformal prediction for spatial functional regression models. In: (a cura di): A. Balzanella M. Bini C. Cavicchia R. Verde, Book of Short paper SIS 2022. p. 1890-1896, Pearson, ISBN: 9788891932310, Caserta, 22-24 GIUGNO, 2022

4.   Balzanella, A., Irpino A., de Carvalho, F.A.T. (2021). Mining multiple time sequences through co-clustering algorithms for distributional data. In: CLADAG 2021 BOOK OF ABSTRACTS AND SHORT PAPER. p. 32-35, FIRENZE:Firenze University Press, ISBN: 978-88-5518-340-6, doi: 10.36253/978-88-5518-340-6

5.   A. Balzanella, R. Verde, A. Irpino (2019). A new ordinary kriging predictor for histogram data in L2-Wasserstein space. In: (a cura di): G. Arbia S. Peluso A. Pini G. Rivellini, Smart statistics for smart applications, book of short papers SIS2019. p. 55-61, Milano:Pearson, ISBN: 9788891915108, Milano, giugno 2019

6.   A. Irpino (2019). Trajectory clustering using adaptive squared distances. In: (a cura di): G. Arbia S. Peluso A. Pini G. Rivellini, Smart Statistics for smart applications, book of short papers SIS 2019. p. 371-378, Milano:Pearson, ISBN: 9788891915108

7.   Francisco de A. T. De Carvalho, Antonio Balzanella, Antonio Irpino, Rosanna Verde . (2018). Co-clustering algorithms for histogram data.. In: (a cura di): A. Abbruzzo E. Brentari M. Chiodi D. Piacentino, Book of Short Papers SIS 2018. p. 338-343, Pearson, ISBN: 978889191023

8.   A. Irpino, F. de A. T. De Carvalho, R. Verde (2017). Automatic variable and components weighting system for Fuzzy cmeans of distributional data. In: Statistics and Data Science: new challenges, new generations. p. 549-552, FIRENZE:Firenze University Press, ISBN: 978-88-6453-521-0, Firenze, 28-30 Giugno 2017

9.   Guénael Cabanes, Younés Bennani, Rosanna Verde, Antonio Irpino (2017). Clustering of histogram data; a topological learning approach. In: Statistics and Data Science: new challenges, new generations. p. 219-226, FIRENZE:Firenze University Press, ISBN: 978-88-6453-521-0, Firenze, 28-30 giugno 2017

10.   De Carvalho, F., IRPINO, Antonio, VERDE, Rosanna (2015). Fuzzy clustering of distribution-valued data using an adaptive L2 Wasserstein distance. In: (a cura di): Adnan Yazici Nikhil R. Pal Uzay Kaymak Trevor Martin Hisao Ishibuchi Chin-Teng Lin Joao M.C. Sousa Bulent Tutmez, Fuzzy Systems (FUZZ-IEEE), 2015 IEEE International Conference on. p. 1-8, IEEE, ISBN: 978-1-4673-7428-6, Istanbul, Turkey, 2-5 Aug. 2015, doi: 10.1109/FUZZ-IEEE.2015.7337847

11.   Balzanella A, IRPINO A, Verde R (2014). Monitoring spatially dependent data streams. In: 47th SIS Scientific Meeting of the Italian Statistical Society Cagliari, June 11-13, 2014. CAGLIARI:CUEC Editrice, ISBN: 9788884678744, Cagliari, 11-13 Giugno 2014

12.   Irpino A, Verde R, Balzanella A (2014). Spatial dependence monitoring over distributed data streams. In: Proceedings of COMPSTAT 2014. p. 483-490, The International Statistical Institute/International Association for Statistical Computing, ISBN: 978-2-8399-1347-8, Geneva (Switzerland), 19-22 Agosto 2014

13.   Irpino Antonio, Verde Rosanna (2013). Dimension reduction techniques for distributional symbolic data. In: Advances in Latent Variables. p. 1-8, MILANO:Vita e pensiero, ISBN: 978-

88-343-2556-8, Brescia, Italy, June 19, 2013 – June 21, 2013

14. Ferraro, M.; Irpino, A.; Verde, R. & Guarracino, M. (2013), A novel feature selection method for classification using a fuzzy criterion, *in* 'LION 2013', pp. --.

15. Irpino, A. & Verde, R. (2013), Dimension reduction techniques for distributional symbolic data, *in* 'SIS 2013 Statistical Conference Advances in Latent Variables - Methods, Models and Applications Advances in Latent Variables - Methods, Models and Applications', pp. --.

16. Rivoli, L.; Irpino, A. & Verde, R. (2012), The median of a set of histograms, *in* 'Book of short papers,XLVI Riunione Scientifica della Società Italiana di Statistica ', CLEUP, PADOVA – ITA, pp. --.

17. Guarracino Mario Rosario, Irpino Antonio, Rosanna Verde (2010). Multiclass Generalized Eigenvalue Proximal Support Vector Machines. In: Complex, Intelligent and Software Intensive Systems (CISIS), 2010 International Conference on. p. 25-32, IEEE, ISBN: 978-1-4244-5917-9, Krakow, Poland, February, 15th - 18th 2010, doi: 10.1109/CISIS.2010.162

18. VERDE R, IRPINO A (2008). Comparing Histogram Data Using a Mahalanobis–Wasserstein Distance. In: Proceedings in Computational Statistics, COMPSTAT 2008. p. 77-89, HEIDELBERG:Springer Berlin, ISBN: 978-3-7908-2083-6, PORTO (PORTUGAL), 24-29 AUGUST 2008, doi: 10.1007/978-3-7908-2084-3

19. IRPINO A, IACONO M (2008). Improving MHIST algorithm for multidimensional histogram exraction from large databases. In: SFC-CLADAG 2008, book of short papers. p. 321-324, NAPOLI:Edizioni Scientifiche Italiane, ISBN: 9788849516562, CASERTA, 11-13 JUNE 2008

20. Irpino A, Lechevallier Y (2008). Proximity measures for data described by histograms. In: Atti XLIV Riunione Scientifica della Società Italiana di Statistica. Arcavate di Rende - Cosenza, 25-27 giugno

21. IRPINO A, VERDE R (2007). A Wasserstein distance for clustering interval data. In: Proceedings of GFKL 2007. Friburgo, Germany, marzo 2007

22. Irpino A, VERDE R (2007). Clustering linear models using Wasserstein distance. In: Book of short paper Cladag 2007. Macerata:Eum, ISBN: 978-88-6056-020-9, Macerata, 12-14 settembre 2007

23. IRPINO A, VERDE R, LECHEVALLIER Y (2006). Mesure de proximité entre des objets décrits par des histogrammes. In: Actes de l'SFC 2006. Metz, France, Settembre, 2006

24. VERDE R, BALZANO S, IRPINO A (2006). Some Proposals for Symbolic Descriptors Selection. In: Atti della XLIII Riunione Scientifica della Società Italiana di Statistica. p. 63-66, Padova:CLEUP, ISBN: 88-7178-791-9, Torino, 14-16 giugno 2006

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Software

Irpino A (2015). HistDAWass, Histogram-valued Data Analysis. R package freely available from: https://cran.r-project.org/web/packages/HistDAWass/index.html

Phd dissertation thesis

Irpino A., (2000), "*Estrazione di conoscenza da oggetti descritti da variabili modali attraverso Reticoli di Galois*", XIII ciclo, Statistica computazionale e Applicazioni, Napoli

Tech reports

Benedetto M., Irpino A., (1998) *"I numeri tra concetti e parole"*, Rapporto interno DMS, Università Federico II di Napoli

Projects	1998-2000 MURST Italian Research project, "Production and testing of computer assisted systems for the teaching quality survey and placement of graduates", PI Prof. L. Fabbris (University of Padua), Local responsible Prof. S.Balbi (University of Naples "Federico II") . Main activity: Methodological development.
	1999- 2001 MURST Italian Research project, "Statistical models of classification for the analysis of data structured in complex form: methods, software and applications" PI Prof R. Siciliano (University of Naples "Federico II"), Local resp. Prof. R. Verde (Second University of Naples). Main activities: Methodological development and software implementation.
	2000- 2002 MURST Italian Research project, "Data mining and Symbolic data Analysis", PI Prof C. Lauro (University of Naples "Federico II"). Local resp. Prof. R. Verde (Second University of Naples). Main activities: Methodological development and software implementation.
	2001-2003 MURST Italian Research project, "Methods for extraction, validation and representation of statistical information in a decision-making context". PI Prof R. Siciliano (University of Naples "Federico II"), Local resp. Prof. R. Verde (Second University of Naples). Main activities: Methodological development and software implementation.
	2001-2003 European project ASSO - Analysis System of Symbolic Official data - IST-2000-25161, PI Prof. Monique Noirhomme (FUNDP-Namur, Belgium), Scientific responsible Prof. Edwin Diday (Univ. Paris IX – Dauphine- France). Main activities: Methodological development and software implementation.
	2004-2005 PRIN Italian project, "Regulatory Impact Analysis" PI Prof M. Scudiero (University of Naples "Federico II"), Local resp. Prof. R. Verde (Second University of Naples).. Main activity: Methodological development.
	2005 Regional research project L.5, "Development of techniques of analysis of complex data for the definition of an internal rating system and the evaluation of the default risk for PMI according to Basel II agreement", funded by Regione Campania, PI Prof. R. Verde (Second University of Naples).Main activities: Methodological development and software implementation.
	2008 Department research project: Clustering methods for structured data, PI. Prof.Rosanna VERDE, (01/11/2007 - 31/12/2008):
	2009 Department research project: Analysis methods for Data Streams. PI Prof.Rosanna VERDE, (01/01/2009 - 30/06/2010).
	2010 Department research project: Supervised and unsupervised classification for structured and distributed data. PI Prof.Rosanna VERDE, (01/01/2010 - 30/06/2011).
	2011 Department research project: Clustering methods for the segmentation of the Italian tourists, PI Antonio Irpino, (01/01/2011 - 30/06/2012).
	2014-2015 - Scientific responsible for th research WP on "New services" of the regional research project: "Osservatorio del Sistema Universitario campano" CUP C68F09000130002, - P.O. FESR Campania 2007-2013 – O.O.2.1 "Interventi su Aree Scientifiche di Rilevanza Strategica", funded by Regione Campania.
	2019 Local scientific responsible for the Progetto Lauree Scientifiche in Statistics co-funded by MIUR.
Fellowships	- since 2004 ordinary member of SIS - Società Italiana di Statistica - since 2006 member CLADAG- SIS (group of SIS on classification and data analysis) - since 2012 member of the International Association for Statistical Computing (IASC) - since 2016 elected member of ISI (international Statistical Institute)
Referee	***Referee for the following scientific journals:*** - JSDA, Electronic Juornal of Symbolic Data Analysis: http://www.jsda.unina2.it. - Computational Statistics, Springer-Verlag. - Pattern recognition, Elseiver. - Journal of Multivariate Analysis, Elseiver. - ACM Transactions on Knowledge Discovery in Data - ADAC Advances in Data Analysis and Classification, Springer - CSDA Computational statistics and Data Analysis, Esevier
Scientific and organizing committees of conferences	- AKDM-4: PC member - AKDM-5: PC member - AKDM-6: PC member

- COMPSTAT2010: PC member,
- EGC 2012: PC member
- EGC 2014: PC member
- EGC 2015: PC member
- EGC 2016: PC member
- EGC'2013: PC member
- SIS 2016, Salerno, giugno 2016 (Membro del comitato di programma)

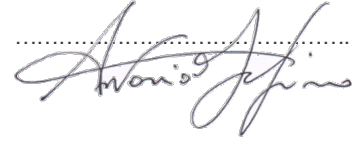| Participation at conferences in Italy and abroad, invited professor and researcher activities (last 10 years)	2010 CLADAG 2010 Firenze – (Comunicazione in specialized session, Organizzatore di sessione specializzata sull'analisi di Data Stream) 2012 SIS 2012 Roma 2012 CLADAG 2012 Capri (NA) 2012 COMPSTAT 2012 Limasol, Cipro 2012 Workshop on Symbolic Data Analysis, Madrid, Spagna 2012 Workshop on Functional data Analysis, Caserta 2014 COMPSTAT 2014 Ginevra, Svizzera 2015 IFCS 2015, Bologna, Italia 2015 CARME 2015, Napoli, Italia 2015 Invited professor presso il CIN dell'UFPE (Università Federale del Pernanmbuco), Recife Brasile, novembre- dicembre 2015 2018 49th Scientific Meeting of the Italian Statistical Society, SIS 2017, 20-22 June, Palermo (Italy) (Contributed talk) 2018 S&DS SIS group Torino, 23-25 May, Torino (Italy) (Contributed talk) 2018 Workshop: Data Science: New Data, new paradigms, Univ. Paris XIII-Dauphine, January, 2018. (Contributed talk) 2017, ISI World Statistics Congress, Marrakech (Morocco), 16-21July 2017 (Contributed talk). 2017 SIS conference on: Statistics and data science. Florence(Italy), 28-30 June 2017, (Contributed talk). 2016 48th Scientific Meeting of the Italian Statistical Society, SIS 2016 – Program committee member 2016 H2DM'16: International Workshop on High Dimensional Data Mining, 7 giugno 2016 Naples (Italy) (Contributed talk) 2015 CARME 2015, Naples, Italy (Contributed talk) 2015 IFCS 2015, Bologne, Italy, (Contributed talk) 2018 workshop SDA 2018, Viana do Castelho (Portogallo),17-21 ottobre 2018. (Contributed talk) 2018 giugno 3-8, Visiting professor at Universidad Complutense de Madrid, hosted by Prof. J. Arroyo.
Teaching activities (last 5 years)	2011-2019 **Statistica per il turismo**, corso di Laurea Triennale in Scienze del Turismo, facoltà di Studi Politici "Jean Monnet" della Seconda Università degli studi di Napoli, 10 CFU Since 2012 **Modelli di Previsione**, corso di Laurea Triennale in Scienze del Turismo, facoltà e poi Dip. di Scienze Politiche "Jean Monnet" della Seconda Università degli studi di Napoli, 6 CFU Since 2015 **Analisi multivariata**, corso di Laurea Magistrale in Scienze della Politica, Dip. di Scienze Politiche "Jean Monnet" della Seconda Università degli studi di Napoli, 6 CFU Since 2017 **Metodi matematici per la comunicazione e il design**, corso di Laurea triennale in Comunicazione e design, Dip. di Architettura, Università della Campania "L.Vanvitelli" Since 2019 **Advanced data Analysis and Visualization**, corso di Laurea triennale in Data Analytics, Dip. di Matematica e Fisica, Università della Campania "L.Vanvitelli" Since 2019 **Psychometrics**, corso di Laurea triennale in Data Analytics, Dip. di Matematica e Fisica, Università della Campania "L.Vanvitelli"
SEMINARS IN ITALY AND ABROAD	Oct. 2003 Lecturer at the ASSO SCHOOL "Symbolic Data Analysis" organized by the Greek Statistical Service, Athene (Greece), Sept. 2015 DDA2015: Distributional Data Analysis, Short Course, Polytechnic of Turin, September 29-30, 2015, Seminars at PhD programme. (5 Hours) Nov 2015 Seminar: Distributional data analysis:basic statistics and clustering, CIN - Federal Univ. of Pernambuco, Recife, Brasil (2 hours) Dec 2015 Seminar: Regression for distributional variables, Dept. of Statistics and Probability, Federal Univ. of Paraiba, João Pessoa, Brasil. (2 hours). Jun 2018 Seminar: "Clustering of distributional data", at Facultad de Informática Departamento de Ingeniería del Software e Inteligencia Artificial (ISIA) (2 hours).
Membership in Phd programmes	2008-2013 Member of the PhD programme board in "Statistics", University of Naples "Federico II". 2016 Member of the PhD programme board in "Social and Statistics sciences", University of Naples "Federico II".

The undersigned authorizes the processing of data personal pursuant to Legislative Decree 196/2003.

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