

Luigi Augugliaro

Researcher unique identifiers: ORCID 0000-0002-4603-7541

EDUCATION

2008 PhD, Statistics, University of Palermo, Italy.

2004 MSc, Statistics and Economics Sciences, University of Palermo, Italy.

CURRENT AND PREVIOUS POSITION

2019 - Associate Professor, Department SEAS, University of Palermo, Italy.

2008 – 2019 Assistant Professor, Department SEAS, University of Palermo, Italy.

MAIN AREAS OF RESEARCH AND RESEARCH OUTPUT

- Model selection; Penalized inference; Computational statistics; High-dimensional data; Generalized linear models; Graphical models; Information geometry.
- I am creator and maintainer of the following packages available for the statistical software R: [dglars](#), [sglasso](#) and [cglasso](#).

VISITING POSITIONS

- Brunel University, London (UK): March 2017, March 2019
- Riken Institute, Wako-Shi (JP): January 2011 – March 2011
- University of Groningen, Groningen (NL): January 2008 – April 2009, July 2017

ORGANISATION OF SCIENTIFIC MEETINGS

- Co-Chair of the 32nd Edition of the European Meeting of Statisticians (Palermo, July 22-26, 2019)
- Organizing team member of the 50nd Scientific meeting of the Italian Statistical Society (Palermo, June 20-22, 2018)
- Program Committee member of the 30nd Edition of the European Meeting of Statisticians (Amsterdam, July 6-10, 2017)
- Invited session organizer: EMS (2019)
- Session Chair: COMPSTAT (2012)

EDITORIAL DUTIES

- Guest Editor for a special issue of the Journal of the Royal Statistical Society;
- Editor of the Book-of-Abstract of the 32nd Edition of the European Meeting of Statisticians (Palermo, July 22-26, 2019);
- Referee for major international journals.

AFFILIATIONS AND PROFESSIONAL SERVICES

- Memberships of scientific organizations: Società Italiana di Statistica (SIS), Bernoulli Society for Mathematical Statistics and Probability, CMStatistics
- Teaching activities: Master in Data Science and Big Data Analytics 2019 – 2020 (University of Palermo, Italy); SIS Summer school in “Analisi dei dati con R: introduzione e applicazioni” – 2012 (Palermo, Italy); SIS Summer school in “Programmazione in Ambiente R per la ricerca in ambito statistica” – 2009 (Palermo, Italy).

Publications

1. Augugliaro, Luigi, Abbruzzo, Antonino, Vinciotti, Veronica (2020). l1-Penalized censored Gaussian graphical model. *BIostatISTICS*, vol. 21, p. 1-16, ISSN: 1465-4644, doi: 10.1093/biostatistics/kxy043
2. Ernst Wit, Luigi Augugliaro, Hassan Pazira, Javier González, Fentaw Abegaz (2020). Sparse relative risk regression models. *BIostatISTICS*, vol. 21, p. 131-147, ISSN: 1465-4644, doi: 10.1093/biostatistics/kxy060
3. Luigi Augugliaro, Gianluca Sottile, Veronica Vinciotti (2020). The conditional censored graphical lasso estimator. *STATISTICS AND COMPUTING*, p. 1-17, ISSN: 0960-3174, doi: 10.1007/s11222-020-09945-7
4. Pazira, H., AUGUGLIARO, Luigi, Wit, E. (2018). Extended differential geometric LARS for high-dimensional GLMs with general dispersion parameter. *STATISTICS AND COMPUTING*, vol. 28, p. 753-774, ISSN: 0960-3174, doi: 10.1007/s11222017-9761-7
5. AUGUGLIARO, Luigi, MINEO, Angelo, Wit, E. (2016). A differential-geometric approach to generalized linear models with grouped predictors. *BIOMETRIKA*, vol. 103, p. 563-577, ISSN: 0006-3444, doi: 10.1093/biomet/asw023
6. Vinciotti, V, AUGUGLIARO, Luigi, ABBRUZZO, Antonino, Wit EC (2016). Model selection for factorial Gaussian graphical models with an application to dynamic regulatory networks. *STATISTICAL APPLICATIONS IN GENETICS AND MOLECULAR BIOLOGY*, vol. 15, p. 193-212, ISSN: 1544-6115, doi: 10.1515/sagmb-2014-0075
7. Salemi, Domenico, Cammarata, G, AGUELI, Cecilia, AUGUGLIARO, Luigi, CORRADO, Chiara, B.i.c.a. MG, RAIMONDO, Stefania, Marfia, A, Randazzo, V, Dragotto, P, Di Raimondo...(2015). miR-155 regulative network in FLT3 mutated acute myeloid leukemia. *LEUKEMIA RESEARCH*, vol. 39, p. 883-896, ISSN: 0145-2126, doi: 10.1016/j.leukres.2015.04.017
8. AUGUGLIARO, Luigi, MINEO, Angelo, Wit, EC (2014). dglars: An R Package to Estimate Sparse Generalized Linear Models. *JOURNAL OF STATISTICAL SOFTWARE*, vol. 59, p. 1-40, ISSN: 1548-7660
9. AUGUGLIARO, Luigi, MINEO, Angelo, Wit, E. (2013). Differential geometric least angle regression: a differential geometric approach to sparse generalized linear models. *JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B STATISTICAL METHODOLOGY*, vol. 75, p. 471-498, ISSN: 1369-7412, doi: 10.1111/rssb.12000
10. MUGGEO, Vito Michele Rosario, SCIANDRA, Mariangela, AUGUGLIARO, Luigi (2012). Quantile regression via iterative least squares computations. *JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION*, vol. 82, p. 1557-1569, ISSN: 0094-9655, doi: 10.1080/00949655.2011.583650
11. AUGUGLIARO, Luigi, MINEO, Angelo (2011). Using differential geometric LARS algorithm to study the expression profile of a sample of patients with latex-fruit syndrome. *ELECTRONIC JOURNAL OF APPLIED STATISTICAL ANALYSIS*, vol. 4, p. 27-234, ISSN: 2070-5948, doi: 10.1285/i20705948v4n2p227
12. Cammarata, G, AUGUGLIARO, Luigi, Salemi, Domenico, Agueli, C, La Rosa, M, Dagnino, L, Civiletto, G, Messana, F, Marfia, A, Bica, MG...(2010). Differential expression of specific microRNA and their targets in acute myeloid leukemia. *AMERICAN JOURNAL OF HEMATOLOGY*, vol. 85, p. 331-339, ISSN: 0361-8609, doi: 10.1002/ajh.21667
13. AUGUGLIARO, Luigi, MINEO, Angelo (2009). Identifying modularity structure of a genetic network in gene expression profile data. *STATISTICA*, vol. 69, p. 187-200, ISSN: 0390-590X
14. CAMMARATA, G, AUGUGLIARO, Luigi, LA ROSA, M, TURRI, D, RIZZO, V, MARFIA, A, AGUELI, C, DAGNINO, L, GIUSTOLISI, R, MIRTO, S...(2007). Gene Expression Profile of Chronic Myeloid Leukemia Innately Resistant to Imatinib. *CLINICAL LEUKEMIA*, vol. 1(4), p. 234-242, ISSN: 1931-6925
15. AUGUGLIARO, Luigi, MINEO, Angelo, Wit, E. (2016). 1-Penalized Methods in High-Dimensional Gaussian Markov Random Fields. In: Augugliaro L; Mineo A; Wit E. (a cura di): Dehmer M; Shi Y; Emmert-Streib F, *Computational Network Analysis with R: Applications in Biology, Medicine, and Chemistry*. p. 201-265, WEINHEIM: WILEY-VCH Verlag GmbH & Co., ISBN: 9783527694365, doi: 10.1002/9783527694365.ch8
16. AUGUGLIARO, Luigi, MINEO, Angelo (2015). Using the dglars Package to Estimate a Sparse Generalized Linear Model. In: *Advances in Statistical Models for Data Analysis. STUDIES IN CLASSIFICATION, DATA ANALYSIS, AND KNOWLEDGE ORGANIZATION*, p. 1-8, HEIDELBERGER PLATZ 3, D-14197 BERLIN, GERMANY: SPRINGER-VERLAG BERLIN, ISBN: 978-3-319-17376-4, ISSN: 1431-8814, doi: 10.1007/978-3-319-17377-1_1