### Saverio Ranciati, Ph.D.

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## CURRENT & PAST POSITIONS

- Postdoc research fellow (2015-2019) in Statistics at the Department of Statistical Sciences "Paolo Fortunati", University of Bologna, Italy;
- Officer (2018-2019) and coordinator (2019) of ySIS, the young group of the Italian Statistical Society; website https://youngsis.github.io/.

#### **EDUCATION**

- Doctorate (2016): Statistical methodology for scientific research; joint double-degree Ph.D. at Department of Statistical Sciences "Paolo Fortunati", University of Bologna, Italy, and J.B. Institute for Mathematics and Computer Science, University of Groningen, The Netherlands; Thesis: "Statistical modelling of spatio-temporal dependencies in NGS data";
- Master's Degree (2012): Statistical Sciences; Thesis: "Latest developments in non-parametric hazard function estimation", Department of Statistical Sciences "Paolo Fortunati", University of Bologna, Italy;
- Bachelor of Science (2010): Statistica e Informatica per la Gestione delle Imprese; Thesis: "Analisi Fattoriale Dinamica sugli ossidi d'azoto in Umbria", Faculty of Economics Department of Economics, Finance and Statistics, University of Perugia, Italy.

# PUBLISHED & WORKING PAPERS

- Ranciati, S., Vinciotti, V., Wit, E., (2019), "Identifying overlapping terrorist cells from the Noordin Top actor-event network", *Annals of Applied Statistics*, under review;
- Ranciati, S., Wit, E., Viroli, C., (2019), "Bayesian Smooth-and-Match strategy for ordinary differential equations models that are linear in the parameters", *Statistica Neerlandica*, under review;
- Ranciati, S., Galimberti, G., Soffritti, G., (2019), "Bayesian Variable Selection in Linear Regression Models with non-normal Errors", *Statistical Methods and Applications*, 28 (2), 323-358;
- Lanci, A., Castagnetti, C., Ranciati, S., Sergio, C., Mariella, J., (2019) "A regression model including fetal orbit measurements to predict parturition in Standardbred mares with normal pregnancy", *Theriogenology*, 126(1), 153-158;
- Crispino, M., D'Angelo, S., Ranciati, S., Mira, A., (2018), "Understanding dependency patterns in structural and functional brain connectivity through fMRI and DTI data", In: Canale A., Durante D., Paci

- L., Scarpa B. (eds) *Studies in Neural Data Science*, START UP RE-SEARCH 2017, Springer Proceedings in Mathematics & Statistics, vol 257(1-22), Springer, Cham;
- Ranciati, S., Galimberti, G., Wit, E.C., Vinciotti, V., (2018), "Overlapping mixture models for network data (manet) with covariates adjustment", Book of Short Papers SIS 2018, ISBN-9788891910233;
- Ranciati, S., Galimberti, G., Soffritti, G., (2017), "Bayesian Variable Selection in Linear Regression Models with non-normal Errors", Book of Short Papers Cladag 2017, ISBN-9788899459710;
- Ranciati, S., Viroli, C., Wit, E., (2017), "Mixture model with multiple allocations for clustering spatially correlated observations in the analysis of ChIP-Seq data", *Biometrical Journal*, 59(6), 1301-1316;
- Ranciati, S., (2016), "Statistical modelling of spatio-temporal dependencies in NGS data", [Dissertation thesis], joint double-PhD programme in Statistical Sciences, XXVIII cycle, supervisor(s): Cinzia Viroli & Ernst C. Wit. Repository (i): University of Bologna, doi:10.6092/unibo/amsdottorato/7680; repository (ii): University of Groningen, print ISBN: 978-90-367-8960-8;
- Ranciati, S., Viroli, C., Wit, E., (2015), "Spatio-temporal model for multiple ChIP-Seq experiments", Statistical Applications in Genetics and Molecular Biology, 14(2), 211-219.

# ORGANIZING & SCIENTIFIC COMMITTEES

- "Smart Statistics for Smart Applications", 49th scientific meeting of the Italian Statistical Society (SIS) at Cattolica University, Milan, Italy, member of scientific committee, website: https://www.mathesia.com/ home/sis19/;
- "StaTalk 2019 @ UniBO", one-day workshop at Department of Statistical Sciences "Paolo Fortunati", Bologna, Italy, member of *local organizing and scientific committee*, website: https://eventi.unibo.it/statalk-2019.

## CONFERENCES, WORKSHOPS & TALKS

- "Clustering two-mode binary network data with overlapping mixture model and covariates information", (invited session) CLAssification and Data Analysis Group (CLADAG) 2019 conference, University of Cassino and Southern Lazio, Cassino, Italy, September 2019;
- "Overlapping mixture model for network data (manet) with covariates adjustment",
  - ERCIM-CSM 2018 conference, Pisa, Italy, December 2018; (invited session)
  - COSTNET18 conference, Warsaw, Poland, September 2018; (contributed session)
  - SIS2018, 48th scientific meeting of the Italian Statistical Society University of Palermo, Palermo, Italy, June 2018; (invited session)

- University College Dublin, Dublin, Ireland, April 2018; (invited session)
- COSTNET17 conference, Palma de Mallorca, Spain, October 2017;
   (contributed session)
- "Bayesian Variable Selection in Linear Regression Models with nonnormal Errors", (contributed session) CLAssification and Data Analysis Group (CLADAG) 2017 conference, University of Milano-Bicocca, Milan, Italy, September 2017;
- "START Up Research" event, June 2017, Certosa di Pontignano, Siena, http://www.congressi.unisi.it/startupresearch/group-leaders/;
- "Mixture model with multiple allocations for clustering spatially correlated observations for the analysis of NGS data", (contributed session) ERCIM-CSM 2015 conference, University of London, London, U.K., December 2015;
- "Mixture model with multiple allocation for clustering spatially correlated observations in gene expression data", (invited session)
  IFCS2015 conference, University of Bologna, Bologna, Italy, July 2015;
- "Spatio-temporal model for multiple ChIP-Seq Experiments", (contributed session)
   Statistical Systems Biology SSB 2014 workshop, University of Warwick, Coventry, U.K., December 2014;
- "Modelling multiple ChIP-seq experiments via a markov random field model with spatio-temporal dependencies",
  - ERCIM-CSM 2014, University of Pisa, Pisa, Italy, December 2014; (invited session)
  - CIBB 2014, University of Cambridge, Cambridge, U.K., June 2014; (contributed session)

# VISITINGS & RESEARCH EXPERIENCES

- <u>Short Term Scientific Mission</u> (STSM) February 2017 STSM through COSTNET Action CA15109 at Department of Mathematics, Brunel University London, Uxbridge, U.K.;
- <u>Visiting PhD student</u> March-October 2014, March 2015 Research experience abroad at J.B. Institute for Math and Computer Science, University of Groningen, Groningen, The Netherlands.

### TEACHING ACTIVITY

#### 2018/2019:

- adjunct professor: "Experimental Methodology And Data Analysis" [AGR/02, 30 hours];
- teaching assistant: "Bayesian Inference" [SECS-S01, 10 hours], "Probability I" [SECS-S01, 10 hours], "Statistical Models and Applications" [SECS-S01, 15 hours], "Applied Statistics" [SECS-S01, 10 hours];

#### 2017/2018:

- adjunct professor: "Experimental Methodology And Data Analysis" [AGR/02, 30 hours];
- teaching assistant: "Bayesian Inference" [SECS-S01, 10 hours], "Probability I" [SECS-S01, 10 hours], "Statistical Models and Applications" [SECS-S01, 15 hours], "Statistical Inference" [SECS-S01, 15 hours], "Applied Statistics" [SECS-S01, 10 hours];

### 2016/2017:

- adjunct professor: "Elements of Statistics" [SECS-S01, 30 hours];
- teaching assistant: "Statistical Models and Applications" [SECS-S01, 15 hours], "Statistical Inference" [SECS-S01, 15 hours], "Applied Statistics" [SECS-S01, 10 hours];

**2015/2016:** teaching assistant: "Statistical Inference" [SECS-S01, 15 hours], "Applied Statistics" [SECS-S01, 10 hours];

**2014/2015:** teaching assistant: "Statistical Inference" [SECS-S01, 15 hours], "Applied Statistics" [SECS-S01, 10 hours];

2013/2014: teaching assistant: "Applied Statistics" [SECS-S01, 10 hours].

### PEER-REVIEWING ACTIVITY

Computational Statistics and Data Analysis (ISSN: 0167-9473), Statistics and Computing (ISSN: 1573-1375), Journal of Royal Statistical Society: Series C (ISSN: 1467-9876), Statistics in Medicine (ISSN: 1973-2201), BMC Bioinformatics (ISSN: 1471-2105), Statistica (ISSN: 1973-2201).

#### COMPUTER SKILLS

Languages & Software: R, C/C++, LateX, STATA, SAS, Git, PHP, MySQL, HTML, Microsoft Office Suite, AdobePhotoshop. Operating Systems: OSX, Windows.

### LANGUAGE SKILLS

Language (level): Italian (primary), English (fluent), Spanish (midlevel), French (basic).