Massimiliano Russo

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Current position

Postdoctoral fellow, *Harvard Medical School program in Therapeutic Sciences*, I am also collaborating with Dr Lorenzo Trippa's group at the Dana-Farber Cancer Institute (DFCI).

Education

2015–2019   **PhD in Statistical Sciences**, *University of Padova, Dept. of Statistical Sciences*,
Thesis: *Bayesian inference for tensor factorization models.*
Advisor: Bruno Scarpa

2013–2015   **Master in Statistical Sciences**, *University of Padova, Dept. of Statistical Sciences*, *Final Mark:* 110/110 cum laude,
Thesis: *Olfactory perception differences in Italian regions: a nonparametric Bayesian approach to tensor factorization.*
Advisor: Bruno Scarpa; Co-advisor: Giancarlo Ottaviano

2009 – 2013   **Bachelor in Statistical and Actuarial sciences**, *Università degli studi del Sannio, Benevento, Final Mark:* 110/110 cum laude,
Thesis: *Multivariate robust estimation.*
Advisor: Luca Greco

Academic experience

Published Papers

Aliverti, E., Paganin, S., Rigon, T. and Russo, M., *A discussion on:Latent nested nonparametric priors* by Camerlenghi, F., Dunson, D.B., Lijoi, A., Prünster, I. and Rodriguez, A.*, Bayesian Analysis , 2019+.

Ottaviano, G. , Pendolino, A. L., Nardello, E. , Maculan, P. , Martini, A. , Russo, M. and Lund, V. J., *Peak nasal inspiratory flow measurement and visual analogue scale in a large adult population*, Clinical Otolaryngology. Accepted Author Manuscript. doi:10.1111/coa.13329, 2019.

Cabassi, A., Casa, A., Fontana, M., Russo, M., and Farcomeni, A., *Three testing perspectives on connectome data*, Springer Proceedings in Mathematics & Statistics, vol 257, 37–55. Springer, Cham, 2018.

Russo, M., Durante, D. & Scarpa, B., *Bayesian Inference on Group Differences in Multivariate Categorical Data*, Computational Statistics & Data Analysis. 126, 136-149, 2018.

Cantone E., Ciofalo A.,Vodicka J., Iacono V., Mylonakis I., Scarpa B.,Russo M.,Iengo M., de Vincentiis M., Martini A. and Ottaviano G., *Pleasantness of olfactory and trigeminal stimulants in different Italian regions.*, European Archives of Oto-Rhino-Laryngology, 1–7, 2017.

Russo, M., *Detecting Group Differences in Multivariate Categorical Data*, Proceedings the Italian Statistical Society, Firenze University Press, 2017.

Submitted Papers	**Russo,M., Singer, B. H. & Dunson, D. B.**, *Multivariate mixed membership modeling: Inferring domain-specific risk profiles*, arXiv preprint, arXiv:1901.05191.
Conferences & Talks	**Inference in Clinical trials when the patient population is subject to changes over time**, *HiTS Annual Symposium*, Boston, MA, USA, October 21, 2019, (Poster)..
	Soft classification tree ensemble of Higgs pair production, *Advanced Statistics for Physics Discovery*, Padova, Italy, September 24, 2018, (Poster).
	Scalable inference for network factor model, *Advanced Statistics for Physics Discovery*, Padova, Italy, September 24, 2018, (Speed Talk).
	Multivariate mixed membership modeling: Inferring domain-specific risk profiles, *IBC2018*, Barcellona, Spain, July 10, 2018, (Contributed talk).
	Multivariate mixed membership modeling: Inferring domain-specific risk profiles, *ISBA2018*, Edinburgh, United Kingdom, June 29, 2018, (Poster).
	A multivariate mixed membership model for malaria risk detection, *Obayes2017*, Austin, Texas, December 11, 2017, (Poster).
	Detecting Group Differences in Multivariate Categorical Data, *SIS2017*, Florence, Italy, June 28, 2017, (Poster).
	Bayesian Inference on Group Differences in Multivariate Categorical Data, *COBAL V*, Cimat, Guanajuato, Mexico, June 8, 2017, (Contributed talk).
	Bayesian Inference on Group Differences in Multivariate Categorical Data, *ISBA2016*, Sardinia, Italy, June 16, 2016, (Poster).
Teaching	**Parallel Computing for big data analysis**, *16 & 23 March 2018*, Specialist lectures during the class of *Statistical Methods for Big Data Analysis* of Prof. Bruno Scarpa, University of Padova, Dept. of Statistical Sciences, Padova, Italy.
Research interests	Analysis and design of clinical trial, Bayesian nonparametrics, Tensor Factorization, Categorical variables, Hierarchical models, Models for Latent Variables, Machine Learning and Data Mining, Computational Statistics.

Awards

Research Prize 2018 Dept. of Statistical Sciences, University of Padova: Best paper award for "Bayesian Inference on Group Differences in Multivariate Categorical Data"

Winner of the *3 minutes thesis competition* selection of Dept. of Statistical Sciences, University of Padova, October 19, 2018.

Young researcher travel award ISBA2018, Edinburgh, United Kingdom.

Young researcher travel award ISBA2016, Sardinia, Italy.

Work experience

Feb. 2019 – Aug. 2019	**Data Analyst**, *WorkFor, WFIT CRM Services*, Roma.
Oct. 2014 – Jul. 2015	**Tutor**, *University of Padua, Dept. of Statistical Sciences*, Padova.
	Small lectures and homework assistance for undergraduate/graduate students.

Study visits

Nov. 2016 – June 2017 Sept. 2017 – Mar. 2018	**Visiting Research Scholar**, *Duke University, Department of Statistical Science*, Durham, NC, USA, under the supervision of prof. David B. Dunson.

Languages

Italian: native; English: fluent; French: basic; Spanish: basic.

Computing skills

Programming languages	R (advanced) practice of Rcpp, plyr/dplyr, ggplot2, shiny libraries, C/C++,JAVA, Python, Julia, Matlab.
Operative System	Linux (Fedora/Ubuntu), Windows, OSX and relative softwares.
Software	SPSS, PSPP, Office, SQL/MYSQL,Bugs/Jags/Stan, Nimble.
Other	LaTeX, Sweave, Knitr, Markdown, git/github, vim & emacs.

29 November 2019