ANGELA ANDREFILA

PhD Student - University of Padova

I am a Ph.D. student at the Department of Statistical Sciences of the University of Padova, Cycle XXXIII. I am working with Professor Livio Finos about statistical methods to analyze neuroscience data, e.g., fMRI data. Mainly, my interest is to connect the psychological and statistical fields improving both areas. For that, I am a member of the Psicostat group at the University of Padua.

One project is about a spatial regularization of the Procrustes method used in the functional alignment of brain data, i.e., the von Mises-Fisher-Procrustes model. I am collaborating with Professor James Haxby from the Department of Psychological and Brain Sciences at Dartmouth College and with the Haxby Lab.

Another project is about a permutation-based approach of the All Resolution Inference method under the supervision of Professor Jelle Goeman from the Department of Biomedical Data Sciences and Professor Wouter Weeda from the Department of Psychology at Leiden University.

I am also collaborating with Paolo Brambilla and Giuseppe Delvecchio on various psychiatrical and psychological projects.

INTERESTS:

- High Dimensional Statistics in Neuroscience, and Medicine in general;
- Multiple Testing and Selective Inference in Psychology, Psychiatry, Neuroscience, and Medicine in general;
- Permutation Tests in Psychology, Psychiatry, Neuroscience, and Medicine in general;
- · Procrustes Methods in Neuroscience;
- · Multivariate analysis in Psychology, Psychiatry, Neuroscience and Medicine in general



EDUCATION

10/2017 - now

University of Padova

PhD Student

Padua, Italy

Thesis: Multivariate analysis in functional magnetic resonance imaging (fMRI) data

10/2013 03/2016

University of Padova

M.S. in Statistical Science - 104

Padua, Italy

Thesis: The Catalan National Movement analyzed by Twitter data.

10/2010 04/2013

University of Padova

B.S. in Statistical Science - 110

Padua, Italy

Thesis: Twitter Sentiment Analysis in Monti's 2013 election campaign.



CONTACT INFO

- a.andreella8@gmail.com
- angela.andreella@phd.unipd.it
- github.com/angeella
- aangeella
- angelaandreella.netlify.com

LANGUAGES

Professional proficiency: Italian (mother tongue), English, Spanish

Elementary proficiency: French, Catalan

COMPUTER SKILLS

Statistical Packages: R Software -SPSS - SAS - STATA

Languages: R - Python - Matlab -C++ - Markdown - SQL

Other software: LaTeX - Gimp -FSL - GIT

> This resume was made with the R package pagedown.

> > Last updated on 2020-07-17.

		STUDY VISITS	
04/2019 07/2019	•	Visiting PhD Student LUMC, Department of Biomedical Data Science	es. ♀ Leiden, Netherlands.
01/2019 04/2019	•	Visiting PhD Student Dartmouth College, Department of Psychological Sciences.	al and Brain ♥ Hanover, NH, USA.
09/2013 07/2014	•	Erasmus Program Universitat de Barcelona, Department of Mathe	matics and Statistics. ♥ Barcelona, Spain.
	•	TEACHING EXPERIENCE	
10/2020 09/2020	•	Tutor M-PSI/03 Department of Developmental Psychology and University of Padua, Italy	Socialization,
06/2020	•	Master's Lesson about Permutation-base EEG data Department of Statistical Sciences, University of	d Cluster-Mass in
		RESEARCH AND INTERNSHIP	Padua, Italy E✓DEDIENCE
			EXPERIENCE
01/2016 03/2016		Pre-Graduate Intership Stazione Zoologica Anton Dohrn	♥ Naples, Italy
		Pre-Graduate Intership	
03/2016 06/2014		Pre-Graduate Intership Stazione Zoologica Anton Dohrn Pre-Graduate Intership	♥ Naples, Italy
03/2016 06/2014		Pre-Graduate Intership Stazione Zoologica Anton Dohrn Pre-Graduate Intership Universitat Politecnica de Catalunya	♥ Naples, Italy
03/2016 06/2014 06/2015		Pre-Graduate Intership Stazione Zoologica Anton Dohrn Pre-Graduate Intership Universitat Politecnica de Catalunya WORKING EXPERIENCE Private Tutor	Naples, ItalyParcelona, Spain
03/2016 06/2014 06/2015 06/2015 09/2015 - now		Pre-Graduate Intership Stazione Zoologica Anton Dohrn Pre-Graduate Intership Universitat Politecnica de Catalunya WORKING EXPERIENCE Private Tutor Superprof Data analyst	Naples, ItalyParcelona, SpainParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelonaParcelona<
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EDUCATIONAL EXPERIENCE

2017 Present		Psicostat University of Padua	♀ Padua, Italy
2019		Interactive visualisation with R Shiny Leiden University	Q Leiden, Netherlands.
2017		Stochastic calculus of variations and normal approximations 27th Jyväskylä Summer School	
2017	•	Value of information analysis in spatial r 27th Jyväskylä Summer School	nodel ♀ Jyvaskyla, Finland
2017	•	Online Social Media Analytics 27th Jyväskylä Summer School	♥ Jyvaskyla, Finland
		PUBLICATIONS	
2020		Permutation-based True Discovery Proportions for fMRI Cluster Analysis. To be submitted Andreella, A., Goeman, J., Weeda, W., Hemerik, J., Solari, A., and Finos, L.	
2020		The von Mises-Fisher-Procrustes model Magnetic Resonance Imaging data. Submitted Andreella, A., and Finos, L.	in functional
2020		Improving the Functional Alignment of find Spatial Brain Information To be submitted Andreella, A., Feilong, M., Halchenko, Y., Haxby,	-
2020		A Statistical Approach to the Alignment Book of short papers - SIS 2020 Andreella, A., Feilong, M., Halchenko, Y., Haxby,	
2020		The Effect of DHA Supplementation on C with Bipolar Disorder: An Exploratory Ra Trial. Nutrients doi: 10.3390/nu12030708 Ciappolino, V. and DelVecchio, G. and Prunas, C. Finos, L. and Caletti, E. and Siri, F. and Mazzocci Turolo, S. and Agostoni, C. and Brambilla, P.	andomized Control and Andreella, A. and

Altered syntactic abilities in rst episode patients: An inner 2019 phenomenon characterizing psychosis. European Psychiatry. European Psychiatry doi: 10.1016/j.eurpsy.2019.08.001 Delvecchio, G., Caletti, E., Perlini, C., Siri, F. M., Andreella, A., Finos, F., Bellani, M., Fabbro, F., Lasalvia, A., Bonetto, C., Cristofalo, D., Scocco, P., D'Agostino, A., Torresani, S., Imbesi, M., bellini, F., Veronese, A., Bressi, V., and Brambilla, P. Prosody abilities in a large sample of affective and non-2018 affective first episode psychosis patients. Comprehensive Psychiatry doi: 10.1016/j.comppsych.2018.07.004 Caletti, E., Delvecchio, G., Andreella, A., Finos, L., Perlini, C., Tavano, A., Lasalvia, A., Bonetto, C., Cristofalo, D., Lamonaca, D., Ceccato, C., Pileggi, F., FaustoMazzi, F., Santonastaso, P., Ruggeri, M., Bellani, M., and Brambilla, P. **♣** TALKS Quot capita, tot sententiae. Don't Forget to Use Anatomical 02/2020 Features into the Alignment of fMRI Data Cognitive Science Arena Prixen, Italy A Statistical approach to the alignment of fMRI data 09/2019 6th European Student Conference on Behaviour & Cognition Padua, Italy First steps with Python 12/2019 Psicostat 3.1 Padua, Italy A Statistical approach to the alignment of fMRI data 07/2019 12th IBS - Italian Region conference ♦ Naples, Italy

Haxby Lab

06/2019

04/2019

02/2019

06/2020

 Improving the Functional Alignment of fMRI Data Using Spatial Brain Information
 Organization for Human Brain Mapping (OHBM)

♥ Virtual conference

How to improve the functional alignment of fMRI data

A Statistical approach to the alignment of fMRI data

A Statistical approach to the alignment of fMRI data

• Leiden, Netherlands

Phanover, New Hampshire, USA

Padua, Italy

usingspatial brain information?

HighDim reading club

Psicostat 3.0

POSTERS

PRDA package: Enhancing Statistical Inference via
Prospective and Retrospective Design Analysis
European R users meeting (eRum) ♥ Virtual conference

10/2019 • A Statistical approach to the alignment of fMRI data

Zero Tre, Prospettive e Nuove Ricerche in Psicometria ♥ Padua, Italy

	MEMBERSHIPS
•	Member of the Italian Region of the International Biometrical Society Italian Region of the International Biometric Society
•	Member of Organization for Human Brain Mapping (OHBM) Organization for Human Brain Mapping
Ö	HONOURS AND AWARDS
•	Scholarship for excellence by the University of Padua
*	CERTIFICATION
	SQL Fundamental Course SoL - Society for Organizational Learning - Italy
	Security training course University of Padova
•	Certificate of Interviewer VALMON S.r.I
	AUTHOR/CONTRIBUTOR OF THE FOLLOWING PACKAGES FOR R/PYTHON
•	ARIpermutation
•	PRDA
•	vMFPmodel