Postdoctoral Fellow,
Max Planck Institute
for Human Development,
Berlin, Germany.

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Experience

- **Postdoctoral Fellow**, Max Planck Institute for Human Development, Germany, 2019-.
- **Postdoctoral Fellow**, Department of Psychology, Harvard University, USA, 2017-2019.
  - Designed a novel Reinforcement Learning paradigm to model human moral learning.
  - Conducted a meta-analysis to dissociate the role of empathic concern versus distress in altruism.
  - Created multiple R packages to analyze and visualize data (used by thousands of people worldwide).
- **Ph.D. Researcher**, Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy, 2011-2015.
  - Collected and analyzed over a billion records of neuroimaging (both functional and anatomical) and psychophysiological (skin conductance) data to link human moral decision-making and brain function.
  - Created novel Virtual Reality paradigms to study human moral *behavior*.
  - Studied clinical deficits in autism, multiple sclerosis, and anxiety disorders.

Technical Skills

- **Programming skills**
  Data analysis: R (advanced), MATLAB (intermediate), Python (beginner)
  Web development: HTML/CSS (intermediate), JavaScript (intermediate)
  Database management: SQL (intermediate)
  Document preparation: RMarkdown (advanced), xaringan (advanced), LaTeX (intermediate)
  Miscellaneous: Git/GitHub, YAML
- **Open-source software development** (in R; published on CRAN; Total downloads: **115,510**):
  - ggstatsplot (Downloads: 38,757, since April 2018): Informative data visualizations with statistical analyses.
  - groupedstats (Downloads: 28,263, since July 2018): Grouped statistical analyses.
  - broomExtra (Downloads: 27,578, since March 2019): Enhancements for working with regression models.
  - statsExpressions (Downloads: 10,006, since August 2019): Creates expressions with statistical details.
  - pairwiseComparisons (Downloads: 10,906, since August 2019): Multiple pairwise comparison tests.
  - Co-author on insight, parameters (downloads: ¿ 500K)
- **Techniques**: text mining, machine learning, meta-analysis, logistic/linear regression, linear/ordinal mixed effects regression, clustering (k-means, hierarchical cluster analysis, linear discriminant analysis), k-nearest neighbor, bagging, random forests, support vector machines, dimensionality reduction (PCA, ICA), Reinforcement Learning, Bayesian statistics, cross validation, neural networks, naive Bayes classification, Structural Equation Modeling, path analysis
- **Online data collection**: Qualtrics, MTurk

Publications

- **13** first author, peer-reviewed publications
  Citations: **439**, h-index: **9**, i10-index: **9**, Open materials (13/13)
  Selected media coverage: *Time*, *The Huffington Post*, *Daily Mail*, *la Repubblica*, etc.

Education

- **Doctor of Philosophy** (**Neuroscience**), SISSA, Trieste, Italy, 2011-2015 (*summa cum laude*).
- **Master of Science** (**Physics**), Department of Physics, University of Pune, India, 2008-2010.
- **Bachelor of Science** (**Physics**), Fergusson College, India, 2005-2008.

Other Skills

- **Communication**: Skilled at disseminating complex ideas to a range of audiences, including scientists and the general public (> **20** talks, published articles for newspapers).
- **Advising/Project Management**: Coordinated large teams of multi-national researchers across multiple neuroimaging studies across several years. Supervised and trained **7** students' undergraduate theses.