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

# Indrajeet Patil



# **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.
- Ph.D. Researcher, Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy, 2011-2015.
  - Collected and analyzed neuroimaging data to link 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)

Database management: SQL (intermediate)

Web development: HTML/CSS (intermediate), JavaScript (intermediate)

Document preparation: RMarkdown (advanced), xaringan (advanced), LATEX (intermediate)

- Open-source software development (in R; as lead developer; Total downloads: 453,567):
  - ggstatsplot (Downloads: 94,978, 2018-): Informative data visualizations with statistical analyses.
  - groupedstats (Downloads: 65,693, 2018-): Grouped statistical analyses.
  - broomExtra (Downloads: 85,010, 2019-): Enhancements for working with regression models.
  - statsExpressions (Downloads: 60,049, 2019-): Creates expressions with statistical details.
  - pairwiseComparisons (Downloads: 60,965, 2019-): Multiple pairwise comparison tests.
  - tidyBF (Downloads: 36,742, 2020-): Tidy wrapper for Bayes Factor tests.
  - ipmisc (Downloads: 50,130, 2020-): Miscellaneous functions for data cleaning.
  - Co-author on correlation, insight, parameters (downloads: > 1M)
- Techniques: text mining, meta-analysis, logistic/linear regression, mixed effects regression, clustering (k-means, hierarchical cluster analysis, linear discriminant analysis), k-nearest neighbor, bagging, random forests, SVM, dimensionality reduction (PCA, ICA), Reinforcement Learning, Bayesian statistics, cross validation, neural networks, Structural Equation Modeling, path analysis

# **Publications**

• 13 first author, peer-reviewed publications

Citations: **682**, *h*-index: **11**, *i*10-index: **12**, 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.

### Languages

Marathi (C2), Hindi (C2), English (C2), German (B2), Italian (A2)

#### 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.