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

Indrajeet Patil

(patilindrajeet.science@gmail.com)
November 7, 2019



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**: R (advanced), HTML (intermediate), CSS (intermediate), SQL (intermediate), MATLAB (intermediate), Python (beginner)
- Open-source software development (in R; published on CRAN; Total downloads: 85,795):
- ggstatsplot (Downloads: 30,969, since April 2018): Informative data visualizations with statistical analyses.
- groupedstats (Downloads: 22,883, since July 2018): Grouped statistical analyses.
- broomExtra (Downloads: 20,875, since March 2019): Enhancements for working with regression models.
- stats Expressions (Downloads: 4,972, since August 2019): Creates expressions with statistical details.
- pairwiseComparisons (Downloads: 6,096, since August 2019): Multiple pairwise comparison tests.
- 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
- Document preparation: LATEX, RMarkdown, xaringan
- Version-control system: Git
- GUI softwares (for statistical analysis): SPSS, jamovi, JASP, Amos, G*Power
- Online data collection: Qualtrics, MTurk

Publications

• 13 first author, peer-reviewed publications Citations: 425, h-index: 9, i10-index: 9, Open materials (13/13) Selected media coverage: Time, The Huffington Post, Daily Mail, la Republica, 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.