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; Total downloads: > 7M):

Lead developer

- ggstatsplot (2018-): Informative data visualizations with statistical analyses.
- broomExtra (2019-): Enhancements for working with regression models.
- statsExpressions (2019-): Creates expressions with statistical details.
- pairwiseComparisons (2019-): Multiple pairwise comparison tests.

Team developer

- Co-author on correlation, insight, parameters, see, report, performance, bayestestR, ggsignif
- 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: 977, h-index: 14, i10-index: 17, 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.