

Maheen Shermohammed

EDUCATION

Harvard University, PhD, Psychology Cambridge, MA
National Science Foundation Graduate Research Fellowship May 2019
Relevant Coursework: Data Science II (audit); Bayesian Statistics; Advanced Statistical Modeling

Duke University, BSc, Neuroscience Durham, NC
May 2012

EXPERIENCE

Geisinger Health System Remote
Staff Scientist, Behavioral Insights Team 2019 – 2021

- Integrated principles from healthcare, psychology, and statistics to develop novel and pragmatic interventions aimed at improving medical decision-making and patient health outcomes
- Led the implementation and statistical analysis of 15+ research projects, including 4 observational studies and 9 preregistered randomized controlled trials
- Coordinated with partners in virology, data science, and operations to develop an ML algorithm to classify patients' risk for severe flu and to target vaccination promotion efforts, resulting in ~700 more patients obtaining the flu shot

Harvard University Cambridge, MA
PhD Researcher 2014 – 2019

- Designed and implemented independent research projects, including the collection and analysis of data from MRI scans, behavior, surveys, physiological recordings, and real-time digital assessments via wearables and smartphones
- Performed statistical analyses (e.g. linear regression, mixed effects modeling) to interpret data using R and Python
- Trained logistic regression model to predict with 95% accuracy whether a person was sleeping using only smartphone data, verifying estimates with wrist-worn activity monitors

MIT Cambridge, MA
Research Assistant 2012 – 2014

- Programmed 10 experimental tasks in Python: github.com/maheen/gablab-psychopy-tasks
- Managed recruitment and data collection for 4 separate multi-year MRI studies

LEADERSHIP & SERVICE

Shermohammed Women's Education Foundation Cambridge, MA
Co-Founder & Vice President 2020 – Present

- Created a non-profit that funds education for underserved girls aged 10-16 in Karachi, Pakistan
- Built the organization's website: swefpakistan.org

Harvard Women in Psychology Cambridge, MA
Co-Founder & Co-President 2016 – 2018

- Organized professional development events and scientific meetings for 60+ regular members, including the establishment of an annual conference that marked over 1200 registered attendees in 2021
- Programmed interactive data visualization dashboard using Shiny in R: women.psychology.harvard.edu/seethestats

SKILLS

Programming: R (including ggplot2), Python, shell scripting

Statistics: Expertise in analysis of variance, linear and logistic regression, mixed models, power analyses; Experience with factor analysis, negative binomial & gamma models, clustering analysis, nonlinear regression

Languages: English (native), Urdu/Hindi (fluent), Arabic (beginner)

WRITING & PRESENTATIONS

- Gave 15 research presentations to expert audiences, 50+ to non-expert audiences
- Published in leading scientific journals, both as lead author and as a member of interdisciplinary teams