MEGHA JOSHI

Experienced statistician with strong background and interest in causal inference and meta-analysis. I have five years of experience in managing and leading research projects, analyzing large, complex datasets, and communicating results effectively.

🎓 EDUCATION

2021 (expected)

The University of Texas at Austin
PhD in Quantitative Methods 📍 Austin, TX

Advisors: Dr. Tasha Beretvas and Dr. James E. Pustejovsky

Thesis: Cluster wild bootstrapping to handle dependent effect sizes in meta-analysis with small number of studies

2014

Bryn Mawr College
BA in Art History and Psychology 📍 Bryn Mawr, PA

💻 WORK EXPERIENCE

2020 | Present

Graduate Research Assistant
The University of Texas at Austin 📍 Austin, TX

- Led the methods team for a project examining the effects of teacher preparation programs on teacher retention in Texas; devised and delegated weekly data analytic tasks to a team of three people.
- Integrated large relational datasets from the Texas Education Agency and the State Board for Educator Certification.
- Analyzed the impact of preparatory programs on employment and retention using propensity score weighting, linear probability model, and survival analysis.

2017 | 2020

Graduate Research Assistant
The University of Texas at Austin 📍 Austin, TX

- Evaluated the impact of a college preparatory program using propensity score analysis with generalized boosted modeling.
- Integrated large relational datasets containing information on all students in Texas schools from multiple sources like the Texas Education Agency and the Texas Higher Education Coordinating Board.
- Created technical reports on the findings; communicated findings to stakeholders.

2016

Graduate Research Assistant
The University of Texas at Austin 📍 Austin, TX

- Coordinated a research project on undergraduate research experiences.
- Designed a survey using Qualtrics and recruited over a thousand undergraduates nationwide to participate.
- Analyzed data using structural equation modeling.

CONTACT INFO

- ✉ megha.j456@utexas.edu
- 🌐 meghapsimatrix.com
- ⬡ github.com/meghapsimatrix
- ✆ 469-235-3003
- 📍 Austin, Texas

For more information, please contact me via email.

SKILLS

Statistical Software: R, Python

Version Control: Git

Project Management: Trello

RESEARCH INTERESTS

Causal inference

Meta-analysis

Missing data analysis

Machine learning

R PACKAGE

simhelpers 0.1.0

TEACHING EXPERIENCE

2015 | Present

Graduate Teaching Assistant
The University of Texas at Austin   Austin, TX

• Assisted in the following courses: Causal Inference; Data Analysis, Simulation and Programming in R; Research Design; Survey of Multivariate Methods; Fundamental Statistics; and Statistics in Market Analysis.

• Effectively communicated complex statistical methods to students with little prior background in the field.

PUBLICATIONS AND TECHNICAL PAPERS

2019

Direct ties to a faculty mentor related to positive outcomes for undergraduate researchers
BioScience, Volume 69, Issue 5, Pages 389–397   Austin, TX
Joshi, M., Aikens, M. L., & Dolan, E. L.

2019

The performance of multivariate methods for two-group comparisons with small samples and incomplete data
Multivariate Behavioral Research, Pages 1-18   Austin, TX
Pituch, K. A., **Joshi, M.**, Cain, M. E., Whittaker, T. A., Chang, W., Park, R., & McDougall, G. J.

2019

Evaluating the Transition to College Mathematics course in Texas high schools: Findings from the first year of implementation
Greater Texas Foundation   Austin, TX
Pustejovsky, J. E., & **Joshi, M.**

CONFERENCE PRESENTATIONS

2019

Cluster wild bootstrapping to handle dependent effect sizes in meta analyses with small numbers of studies
Poster session at the American Educational Research Association annual meeting
          Toronto, Canada
Joshi, M., Cappelli, P., Pustejovsky, J. E., & Beretvas, S. N.

2019

Small sample performance of multilevel and traditional methods for multivariate group comparisons with incomplete data
Roundtable session at the American Educational Research Association annual meeting
          Toronto, Canada
Pituch, K. A., Whittaker, T. A., **Joshi, M.**, Park, R., & Cain M. E.