MEGHA JOSHI

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

🎓 EDUCATION

2021

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

2021 | Present

Quantitative Researcher
American Institutes for Research   📍 Austin, TX
- Develop methodological strategies for projects using causal inference and meta-analysis. Conduct the analyses evaluating impacts of programs and policies.
- Conduct methodological studies to examine performance of different statistical methods.
- Created a Shiny app for users to run meta-analyses and plot research evidence gaps.

2021

Data Scientist
Analyst Institute   📍 Austin, TX
- Developed the codebase infrastructure to conduct inferential analysis on data with over a hundred million rows and data with complex structures.
- Designed the methodological and analytical strategy to conduct the inferential analysis.
- Solved methods related issues such as selecting appropriate cluster robust variance estimator, and estimating marginal causal effects.

2021

Statistical Consultant
Freelance   📍 Austin, TX
- Executed a meta-analysis examining the extent of bias in analyses of quasi-experimental designs that have different study characteristics.
- Implemented code to run meta-analytic models accounting for complex data structures.
- Produced graphs and tables displaying the results.

CONTACT INFO

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🌐 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: Asana, Trello

RESEARCH INTERESTS

Causal inference

Meta-analysis

Machine learning

R PACKAGES

wildmeta 0.3.2

simhelpers 0.1.2

2016
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2021

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.
- Evaluated the impact of a college preparatory program using propensity score analysis with generalized boosted modeling.
- Integrated large relational datasets.
- Developed and implemented the analytical strategy.
- Produced reports and presentations detailing the results to be presented to a non-technical audience.

TEACHING EXPERIENCE

2015
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2021

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.
- Led weekly problem-solving sessions through office hours; effectively communicated complex statistical methods to students; and, fostered interest in methodological research.

PUBLICATIONS AND TECHNICAL PAPERS

2022

Cluster wild bootstrapping to handle dependent effect sizes in meta-analysis with a small number of studies
Research Synthesis Methods

Joshi, M., Pustejovsky, J. E., & Beretvas, S. N.

2019

Direct ties to a faculty mentor related to positive outcomes for undergraduate researchers
BioScience, Volume 69, Issue 5, Pages 389–397

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

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

Pustejovsky, J. E., & **Joshi, M.**