

MEGHA JOSHI

Experienced statistician with strong background and interest in causal inference and meta-analysis. I have six 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



RESEARCH EXPERIENCE

- 2021
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Present • **Quantitative Researcher**
American Institutes for Research 📍 Austin, TX
- Develop methodological strategies for projects using causal inference and meta-analysis. Conduct the analyses.
 - Clean and merge data with millions of rows.
 - Create 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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🔗 github.com/meghapsimatrix
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📍 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

[simhelpers 0.1.1](#)

[wildmeta 0.0.0.9000](#)

*This resume was made with the R package **pagedown**.*

Last updated on 2021-09-22.

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

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.



SELECTED 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.