MEGHA JOSHI

Experienced statistician 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

Senior Quantitative Researcher
American Institutes for Research — Austin, TX

- Lead quantitative impact analyses by developing methodological strategies for projects using causal inference, machine learning, and meta-analysis. Develop reproducible analyses that implement these strategies. Delegate analytic tasks and mentor junior staff.
- Conduct methodological studies to examine performance of different statistical methods.
- Produce automated reports with intuitive visualizations of impact results for presentation to a non-technical audience.

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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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

simhelpers

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

2016 | 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 | 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.

SELECTED PUBLICATIONS

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.**