# **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

Paryn Mawr, PA

## RESEARCH EXPERIENCE

2021 | Present

#### 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.

2020 | 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.
- · Integrated large relational datasets.
- Developed and implemented analytical strategy using survival analysis to estimate the impact of the preparatory programs.
- Produced reports and presentations detailing the results to be presented to a non-technical audience.

### **CONTACT INFO**

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- meghapsimatrix.com
- github.com/meghapsimatrix
- **J** 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

simhelpers 0.1.1

wildmeta 0.0.0.9000

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

Last updated on 2021-08-16.

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.
- Developed the codebase to clean and analyze the data.
- · Created technical reports on the findings; effectively communicated findings to stakeholders.

#### ♣■ 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.
- 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.