# **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

Paryn Mawr, PA

## RESEARCH 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
- **J** 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 PACKAGES

simhelpers 0.1.0

wildmeta 0.0.0.9000

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

Last updated on 2020-11-30.

# **₽** 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 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.

## 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.



2020

What Works Clearinghouse Group Design Standards
Online Training