






# 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  Bryn Mawr, PA

## WORK 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. Access to the data was provided by the UT [Education Research Center](#).
    - Analyzed the impact of preparatory programs on employment and retention using 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. Access to the data was provided by the UT [Education Research Center](#).
    - 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

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 [meghapsimatrix.com](http://meghapsimatrix.com)  
 [github.com/meghapsimatrix](https://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: Trello

## RESEARCH INTERESTS

Causal inference

Meta-analysis

Missing data analysis

Machine learning

## R PACKAGE

[simhelpers 0.1.0](#)

*This resume was made with the R package [pagedown](#).*

*Last updated on 2020-11-10.*



## 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

📍 Austin, TX

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

📍 Austin, TX

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*

📍 Austin, TX

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.