

# MEGHA JOSHI

Experienced statistician with strong background and interest in causal inference, meta-analysis, and missing data.



## EDUCATION

2020  
(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

2017

**The University of Texas at Austin**  
MEd in Quantitative Methods

Austin, TX

2014

**Bryn Mawr College**  
BA in Art History and Psychology

Bryn Mawr, PA



## PUBLICATIONS

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.



## TECHNICAL PAPERS

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.

## CONTACT INFO

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🌐 [meghapsimatrix.com](http://meghapsimatrix.com)

🔗 [github.com/meghapsimatrix](https://github.com/meghapsimatrix)

☎ 469-235-3003

For more information, please contact me via email.

## SKILLS AND INTERESTS

Statistical analysis and data visualization

Causal inference, experimental design, meta-analysis, and missing data analysis

Machine learning

R, Python, SQL, Git, Tableau

## R PACKAGE

[simhelpers 0.1.0](#)

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

Last updated on 2020-10-22.

## 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.

## WORK EXPERIENCE

- 2020  
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Present ● **Graduate Research Assistant**  
The University of Texas at Austin Austin, TX  
*Supervisors: Dr. Pedro Reyes & Dr. Celeste D. Alexander*
- Assisted in an initiative started by Dean Charles Martinez to study the effects of Teacher Preparation Programs (TPPs) on teacher retention in Texas.
  - Integrated large relational datasets from Texas Education Agency and State Board for Educator Certification. Access to the data was provided by the UT [Education Research Center](#).
  - Analyzed the impact of TPPs on employment and retention using linear probability model and survival analysis.
  - Collaborated with team members and delegated data-analytic tasks.
- 2020  
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Present ● **Graduate Research Assistant**  
The University of Texas at Austin Austin, TX  
*Supervisor: Dr. Laura Costello*
- Created surveys to collect information on the impact of COVID-19 outbreak on students, faculty, and staff at the College of Education.
  - Generated reports to be disseminated to the College of Education.
- 2017  
|  
2020 ● **Graduate Research Assistant**  
The University of Texas at Austin Austin, TX  
*Supervisor: Dr. James E. Pustejovsky*
- 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 data like Texas Education Agency and 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  
*Supervisor: Dr. Erin L. Dolan*
- 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.
- 2015-2016 • **Integrated Community Development Intern**  
A Glimmer of Hope Foundation 📍 Austin, TX  
*Supervisor: Leslie Llado*
- Analyzed data related to health, education, water, sanitation, and micro-finance projects carried out by the organization in Ethiopia.
  - Developed a method to estimate the number of people who have benefited from the projects.

## TEACHING EXPERIENCE

- 2015  
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Present • **Graduate Teaching Assistant**  
The University of Texas at Austin 📍 Austin, TX  
*Supervisors: Dr. James E. Pustejovsky, Dr. Keenan A. Pituch, Dr. Sarah M. Collins, Dr. Lindsey J. Smith*
- 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.

## FELLOWSHIPS AND AWARDS

- 2020-2021 • **Graduate School Continuing Fellowship**  
The University of Texas at Austin 📍 Austin, TX
- 2019-2020 • **Teresa Lozano Long Endowed Graduate Fellowship**  
The University of Texas at Austin 📍 Austin, TX
- 2017-2019 • **Graduate Student Recruitment Fellowship**  
The University of Texas at Austin 📍 Austin, TX
- 2015-2016 • **Lee Hage and Joseph D. Jamail Endowed Scholarship in Education**  
The University of Texas at Austin 📍 Austin, TX
- 2012 • **Benjamin Gilman International Scholarship**  
U.S. Department of State 📍 Bryn Mawr, PA
- 2010-2014 • **Bryn Mawr College Grant**  
Bryn Mawr College 📍 Bryn Mawr, PA