

# SHIMIAN (SAM) ZHANG

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## EDUCATION

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**University of Colorado, Boulder**, Boulder, CO

*August 2019 — Present*

*Ph.D. Applied Mathematics*

**Advisor:** Aaron Clauset

**Swarthmore College**, Swarthmore, PA

*Fall 2010 - 2014*

*B.A. Computer Science and Psychology*

**Thomas Jefferson High School for Science and Technology**, Alexandria, VA *Fall 2006 - 2010*

## EMPLOYMENT

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**Microsoft Research NYC**, New York, NY

*May 2021 — August 2021*

*Research Intern, Computational Social Science*

Conducted several experiments to understand how data scientists and tenure-track faculty understand scientific incentives and statistical uncertainty.

**University of Colorado, Boulder**, Boulder, CO

*April 2019 — Present*

*Graduate Research Assistant, Prof. Aaron Clauset*

Using techniques from network science and computational social science to study inequalities in academia.

**OpenCounter**, San Francisco, CA

*January 2017 — January 2018*

*Software Engineer*

Fifth engineer; designed/implemented search engine that is the entrypoint to the permitting portal for 50+ cities, including Salt Lake City, Detroit, and Orlando.

**Pivotal Labs**, Arlington, VA

*July 2015 — September 2016*

*Software Engineer*

DC office founding team member. Engineering lead on several major projects, such as a data science platform for a Fortune 500 company.

**Giant Oak**, Arlington, VA

*September 2014 — July 2015*

*Software Engineer*

Giant Oak's engineering representative on the DARPA Memex project.

## AWARDS

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**National Science Foundation Graduate Research Fellow**, 2020

**University of Chicago Data Science for Social Good Fellow**, 2014

## PUBLICATIONS

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1. Daniel B Larremore, Bailey K Fosdick, Kate M Bubar, Sam Zhang, Stephen M Kissler, C Jessica E Metcalf, Caroline Buckee, and Yonatan Grad. Estimating sars-cov-2 seroprevalence and epidemiological parameters with uncertainty from serological surveys. *medRxiv*, 2020
2. Daniel B Larremore, Bailey K Fosdick, Sam Zhang, and Yonatan H Grad. Jointly modeling prevalence, sensitivity and specificity for optimal sample allocation. *bioRxiv*, 2020

## PRESENTATIONS

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**APPM graduate student seminar, University of Colorado, Boulder, September 2021:** "The fun and joy of static word embeddings"

**International Conference of Computational Social Science (IC2S2), July 2021:** "The role of labor advantages in elite faculty productivity"

**International Conference of Computational Social Science (IC2S2), July 2020:** "The role of students in explaining how prestige drives scientific productivity" (Poster)

**Topology Seminar, University of Colorado, Boulder, March 2020:** "Discrete Morse theory and practice"

## TEACHING ASSISTANTSHIPS AND GRADING

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### **University of Colorado, Boulder**

Biological Networks *Spring 2021*

Calculus 3 for Engineers *Fall 2019*

Linear Algebra for Non-Math Majors *Spring 2019*

Number Systems: An introduction to higher mathematics *Fall 2018*

## SERVICE

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### **University of Colorado, Boulder**

Graduate representative to the department graduate committee *2021-2022*

Steering committee member, United Campus Workers Colorado CWA Local 7799 *2020-2022*

Lead project scoper, Solve for Good Summer *2020*

Cofounder/lead organizer, Boulder/Denver Data for Democracy meetup *2017-2019*