

NATHANIEL PRITCHARD

1300 University Ave., Room 1220, Madison WI 53705
npritchard@wisc.edu

EDUCATION

University of Wisconsin - Madison

Aug. 2018 -

Doctoral Candidate in Statistics Department

Advisor: Dr. Vivak Patel

University of North Carolina - Chapel Hill *Aug. 2014 - May 2018*

BS, *Highest Distinction*, Statistics (Highest Honors) and Economics

RESEARCH INTERESTS

Random Sketching, Randomized Numerical Linear Algebra, High Performance Computing, Preconditioning, Randomized Algorithms

PRE-PRINTS

1. Nathaniel Pritchard and Vivak Patel. Residual tracking and stopping for solving consistent linear inverse problems with finite domains, 2022

PUBLICATIONS

1. Nathaniel Pritchard and Vivak Patel. Towards practical large-scale randomized iterative least squares solvers through uncertainty quantification, 2022
2. Mark He, Joseph Glasser, Nathaniel Pritchard, Shankar Bhamidi, and Nikhil Kaza. Demarcating geographic regions using community detection in commuting networks with significant self-loops. *PLOS ONE*, 15(4):1–31, 04 2020

PRESENTATIONS

Oral:

Pritchard, N., Patel, V. (January 2023). *Towards Practical Large-scale Least Squares Solvers with Iterative Right Random Sketching*. ANL LANS Seminar, Virtual.

Pritchard, N., Patel, V. (April 2022). *Residual Tracking and Stopping for Iterative Random Sketching*. Copper Mountain Conference on Iterative

Methods, Virtual.

Poster:

Pritchard, N., Patel, V. (April 2023). *Large Scale Randomized Iterative Least Squares*. SIAM CSE 2023, Amsterdam, Netherlands.

AWARDS AND HONORS

Outstanding TA	<i>2022-2023</i>
Student Research Grant Competition University of Wisconsin - Madison	<i>February 2023</i>
Honorable Mention Outstanding TA	<i>2021-2022</i>

SKILLS

Computer: Proficient in Julia, R, C, UNIX, Python, Cuda, OpenMp, MPI, PETSc

Language: Spanish