KARAN SRIVASTAVA

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EDUCATION

University of Wisconsin-Madison — *Madison, WI*
Mathematics PhD — *2020-present*

University of Illinois at Urbana-Champaign — *Urbana-Champaign, IL*
BS Mathematics — *2016-2020*
Magna Cum Laude, Highest Distinction in Mathematics

Math in Moscow — *Moscow, Russia*
Study Abroad Program — *Spring 2018*

PUBLICATIONS

"A Perturbation Bound on the Subspace Estimator from Canonical Projections" (with Daniel Pimentel-Alarcon) ISIT 2022

CONFERENCES

International Symposium on Information Theory — *Espoo, Finland*
Presented an accepted publication — *June 2022*

TALKS

A Perturbation Bound on the Subspace Estimator from Canonical Projections — *Espoo, Finland*
International Symposium on Information Theory — *June 2022*

An almost Impossible puzzle and group theory — *Madison, WI*
AMS Student Chapter Seminar — *June 2022*

Why people say "I can't do math" — *Park City, UT*
Presented an Ignite Talk at Park City Math Institute's Summer School. — *July 2019*
You can watch it [here]

AWARDS AND HONORS

Exceptional Teaching Award — *University of Wisconsin*
Awarded to TA's demonstrating excellence in teaching — *2020-2022*
Edmund J. James Scholar — *University of Illinois*
Undergraduate Honors Program — *2017-2020*
Dean's List — *University of Illinois*
Awarded every semester — *2016 - 2020*

ORGANIZATIONS AND OUTREACH

Directed Reading Program   *University of Wisconsin*
Organizer, Mentor   *Fall 2021-present*

Madison Math Circle   *University of Wisconsin*
Organizer   *Fall 2021-present*

Madison Experimental Mathematics Lab   *University of Wisconsin*
Graduate Coordinator   *Spring 2022-present*

Undergraduate Mentor Program   *University of Wisconsin*
Organizer   *Spring 2022-present*

Grad Student Visit Day Panel   *University of Wisconsin*
Graduate Coordinator   *Spring 2022*

Graduate Peer Mentor Program   *University of Wisconsin*
Mentor   *Fall 2022*

TEACHING EXPERIENCE

Math 240: Introduction to Discrete Mathematics   *University of Wisconsin*
Teaching Assistant   *Summer 2022*

Math 222: Calulus and Analytical Geometry II   *University of Wisconsin*
Teaching Assistant*   *Spring 2022*

Math 211: Calculus   *University of Wisconsin*
Teaching Assistant*   *Fall 2021*

Math 222: Calulus and Analytical Geometry II   *University of Wisconsin*
Teaching Assistant*   *Summer 2021*

Math 211: Calculus   *University of Wisconsin*
Teaching Assistant*   *Spring 2021*

Math 221: Calulus and Analytical Geometry I   *University of Wisconsin*
Teaching Assistant*   *Fall 2020*

*Awarded superior teaching assistant rating by the Department of Mathematics

RESEARCH EXPERIENCE

Illinois Gometry Lab   *University of Illinois*
Undergrad Research Program
Advisor: Dominic Culver, Topic: Weierstrass equations of Elliptic Curves   *Spring 2020*
Advisor: Susan Tolman, Topic: Sphere packings on Symplectic Manifolds   *Fall 2018*

PROJECTS

Erdös Institute   *Ohio State University*

Data Science and ML Bootcamp / Project   Summer 2022

For the final project, worked with the ["What's Cooking?" dataset](#) from Kaggle. Used dimensionality reduction and clustering analyses to determine similarity between cuisines based on their ingredients.We worked on Random Forest, Linear SVC, and other classification models and achieved an accuracy of $\approx 80\%$. Project presentation and code base can be found at [this page](#).