

KARAN SRIVASTAVA

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July 2022

EDUCATION

University of Wisconsin-Madison Mathematics PhD	<i>Madison, WI</i> <i>2020-present</i>
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University of Illinois at Urbana-Champaign BS Mathematics Magna Cum Laude, Highest Distinction in Mathematics	<i>Urbana-Champaign, IL</i> <i>2016-2020</i>
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Math in Moscow Study Abroad Program	<i>Moscow, Russia</i> <i>Spring 2018</i>
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PUBLICATIONS

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

CONFERENCES

International Symposium on Information Theory Presented an accepted publication	<i>Espoo, Finland</i> <i>June 2022</i>
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TALKS

A Perturbation Bound on the Subspace Estimator from Canonical Projections International Symposium on Information Theory	<i>Espoo, Finland</i> <i>June 2022</i>
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An almost Impossible puzzle and group theory AMS Student Chapter Seminar	<i>Madison, WI</i> <i>June 2022</i>
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Why people say “I can’t do math” Presented an Ignite Talk at Park City Math Institute’s Summer School. You can watch it here	<i>Park City, UT</i> <i>July 2019</i>
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AWARDS AND HONORS

Exceptional Teaching Award Awarded to TA’s demonstrating excellence in teaching	<i>University of Wisconsin</i> <i>2020-2022</i>
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Edmund J. James Scholar Undergraduate Honors Program	<i>University of Illinois</i> <i>2017-2020</i>
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Dean’s List Awarded every semester	<i>University of Illinois</i> <i>2016 - 2020</i>
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ORGANIZATIONS AND OUTREACH

Directed Reading Program

Organizer, Mentor

University of Wisconsin

Fall 2021-present

Madison Math Circle

Organizer

University of Wisconsin

Fall 2021-present

Madison Experimental Mathematics Lab

Graduate Coordinator

University of Wisconsin

Spring 2022-present

Undergraduate Mentor Program

Co-Founder, Organizer, Mentor

University of Wisconsin

Spring 2022-present

Grad Student Visit Day Panel

Graduate Coordinator

University of Wisconsin

Fall 2021 - Present

Graduate Peer Mentor Program

Mentor

University of Wisconsin

Fall 2022

TEACHING EXPERIENCE

Math 211: Calculus

Head Teaching Assistant

University of Wisconsin

Summer 2022

Math 240: Introduction to Discrete Mathematics

Teaching Assistant

University of Wisconsin

Summer 2022

Math 222: Calculus and Analytical Geometry II

Head Teaching Assistant*

University of Wisconsin

Spring 2022

Math 211: Calculus

Head Teaching Assistant*

University of Wisconsin

Fall 2021

Math 222: Calculus and Analytical Geometry II

Teaching Assistant*

University of Wisconsin

Summer 2021

Math 211: Calculus

Teaching Assistant*

University of Wisconsin

Spring 2021

Math 221: Calculus and Analytical Geometry I

Teaching Assistant*

University of Wisconsin

Fall 2020

*Awarded superior teaching assistant rating by the Department of Mathematics

RESEARCH EXPERIENCE

Illinois Gometry Lab

Undergrad Research Program

Advisor: Dominic Culver, Topic: Weierstrass equations of Elliptic Curves

Advisor: Susan Tolman, Topic: Sphere packings on Symplectic Manifolds

University of Illinois

Spring 2020

Fall 2018

PROJECTS

Erdős Institute

Data Science and ML Bootcamp / Project

Ohio State University

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](#).