# CHRISTOPHER Y. WANG

#### INFORMATION

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### **EDUCATION**

Cornell University

M.S. Mathematics

Ph.D. Mathematics, in progress

May 2025

August 2022–present

Ithaca, NY

2022

April 2022

(virtual)

Advisor: Alex Townsend

Columbia University

New York, NY

B.A. Mathematics, summa cum laude with departmental honors

May 2022

Advisor: Ioannis Karatzas

Thesis: Independence and conditional independence in discrete-time dynamic allocation problems

## **PUBLICATIONS & PREPRINTS**

- · Operator learning for hyperbolic partial differential equations (with Alex Townsend). J. Mach. Learn. Res., to appear. [arXiv:2312.17489]
- · Extensions of true skewness for unimodal distributions (with Yevgeniy Kovchegov, Alex Negrón, and Clarice Pertel). Math. Methods Stat. 33.3 (2024), 239–258. [arXiv:2209.11139]
- · Independence and conditional independence in discrete-time dynamic allocation problems, in revision. [arXiv: 2312.09350]

### **GRANTS & AWARDS**

· NSF Graduate Research Fellowship	2023-2028
· RTG Graduate Fellowship, Cornell University	2022 – 2023

· John Dash van Buren, Jr. Prize in Mathematics, Columbia University

### TALKS & PRESENTATIONS

· Extensions of true skewness for unimodal distributions (poster)

Pi Mu Epsilon Student Poster Session, Joint Mathematics Meeting

TALKS & PRESENTATIONS	
· Exact distribution functions for randomized subspace iteration (poster) Householder Symposium XXII	June 2025 Ithaca, NY
· Operator learning for hyperbolic PDEs (poster) SIAM Conference on Mathematics of Data Science	October 2024 Atlanta, GA
· PDE learning (beyond neural nets) APMA Graduate Student Seminar, Brown University	April 2024 Providence, RI
· Operator learning for hyperbolic PDEs (poster) ICERM Workshop: Numerical Analysis of Multiphysics Problems	February 2024 Providence, RI

### **TEACHING**

### Cornell University

· Teaching Assistant, MATH 2310: Linear Algebra for Data Science

Fall 2025

# Columbia University

· Undergraduate Teaching Assistant, MATH 4061: Intro to Modern Analysis I

Spring 2022

· Undergraduate Teaching Assistant, MATH 1011: Calculus I

Fall 2021

## **SERVICE**

### Outreach Co-chair for Cornell Association for Women in Mathematics

Fall 2022–Spring 2025

Planned several AWM outreach events, notably the 2023, 2024, and 2025 Cornell Julia Robinson Math Festivals for K–12 students, featuring various volunteer-led math activities and a speaker event aimed toward children and general audiences. Also organized the math workshop at Cornell's 2025 Expanding Your Horizons event for middle school girls, as well as the 2024–2025 AWM ZigZag mentoring program.

# **Directed Reading Program Mentor**

Fall 2022–Spring 2023, Fall 2024

Mentored three undergraduate students at Cornell in directed reading in differential topology, partial differential equations, and probability theory.

### Volunteer for Cornell Little Math Circle

Fall 2023

Led several sessions of math activities for kindergarten through 5th grade students.

## Volunteer for Cornell Big Red Math Competition

Fall 2023

Proctored and graded exams for a high school math competition hosted by Cornell.

### Graduate Assistant for the Cornell Math REU

Summer 2023

Advised four undergraduate students participating in the REU program at Cornell in the area of numerical PDEs. Activities included lectures on background theory and weekly meetings with project teams.

### Graduate Mentoring Program Co-organizer

Spring 2023–Fall 2023

Matched matriculating students with peer mentors and organized mentor-mentee social events.

### Columbia College Odyssey Mentor

Fall 2022–Spring 2023

Mentored two undergraduate students at Columbia on internship options, graduate school applications, and other career and academic topics.

#### MISCELLANEOUS

- · Spoken languages: English (native), Mandarin Chinese (native), Spanish (elementary)
- · Programming languages: MATLAB, Python, Javascript, Java, C, SQL