# CHRISTOPHER Y. WANG

### **INFORMATION**

Malott Hall, Department of Mathematics Email: cyw33@cornell.edu

Cornell University Website: chriswang030.github.io

301 Tower Road Phone: +1 (408) 477 9572

Ithaca, NY 14853

### **EDUCATION**

Cornell University Ithaca, NY

Ph.D. Mathematics, in progress August 2022–present

Adviser: Alex Townsend

Columbia University

New York, NY

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

September 2018–May 2022

Adviser: Ioannis Karatzas

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

#### RESEARCH

· Operator learning for hyperbolic partial differential equations (with A. Townsend), submitted. Preprint arXiv: 2312.17489, 2023.

- · Independence and conditional independence in discrete-time dynamic allocation problems, submitted. Preprint arXiv:2312.09350, 2023.
- · Extensions of true skewness for unimodal distributions (with Y. Kovchegov, A. Negrón, C. Pertel), to appear in *Math. Methods Stat.*, 2024.

## **GRANTS & AWARDS**

· ICERM Travel Grant	2024
· NSF Graduate Research Fellowship	2023-2028
· RTG Graduate Fellowship, Cornell University	2022-2023
· John Dash van Buren, Jr. Prize in Mathematics, Columbia University	2022

### **TEACHING**

#### Columbia University

· Undergraduate Teaching Assistant, MATH 4061: Intro to Modern Analysis I Spring 2022

· Undergraduate Teaching Assistant, MATH 1011: Calculus I Fall 2021

## **TALKS**

· PDE learning (beyond neural nets)	April 2024
APMA Graduate Student Seminar, Brown University	Providence, RI
· Operator learning for hyperbolic PDEs (poster) ICERM Workshop: Numerical Analysis of Multiphysics Problems	February 2024 Providence, RI
· Data-driven recovery of hyperbolic PDEs with rank detection Olivetti Club (graduate student seminar), Cornell University	October 2023 Ithaca, NY
· Longest increasing subsequences of random permutations Olivetti Club (graduate student seminar), Cornell University	March 2023 Ithaca, NY

· Multi-armed bandits	April 2022
Undergraduate Math Research Symposium, Columbia University	New York, NY
· Extensions of true skewness for unimodal distributions (poster) Pi Mu Epsilon Student Poster Session, Joint Mathematics Meeting	April 2022 (virtual)
$\cdot$ Extensions of true skewness for unimodal distributions Shenandoah Undergraduate Mathematics & Statistics Conference, James Madison Univ	December 2021 versity (virtual)
· Extensions of true skewness for unimodal distributions Young Mathematicians Conference, Ohio State University	August 2021 (virtual)
· Non-Markovian dynamic allocation in discrete time Topics in Stochastic Analysis, Columbia University	May 2021 (virtual)
· Optimal stopping in discrete time Topics in Stochastic Analysis, Columbia University	March 2021 (virtual)

### **SERVICE**

Outreach Co-chair for the Cornell Association for Women in Mathematics Fall 2022–Spring 2024 Planned several AWM outreach events, notably the 2023 and 2024 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.

### 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.

#### Directed Reading Program Mentor

Fall 2022–Spring 2023

Mentored two undergraduate students at Cornell independently reading on differential topology and partial differential equations.

## 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: Python, Javascript, Java, C, SQL, Wolfram, LATEX