

Ruijia Cao

✉ rc948@cornell.edu • 🌐 ruijiacao.github.io • 🌐 ruijiacao

Education

Cornell University

PhD in Applied Mathematics

Aug 2024 – May 2029 (Expected)

Georgia Institute of Technology

B.S. in Computer Science, Highest Honor

Aug 2020– May 2024

Publications and Preprints

[1] Anton Bernshteyn, Tyler Brazelton, Ruijia Cao, and Akum Kang. Counting colorings of triangle-free graphs. *Journal of Combinatorial Theory, Series B*, 161:86–108, 2023.

[2] Ruijia Cao and Florian Schäfer. Information geometric regularization of the barotropic euler equation, 2023.

Work Experience

CAI

Technical Intern

Allentown, PA

Jun 2023 – Aug 2023

- Analyzed data sets for VERTEX IT service desk using PowerBI and M query.
- Automated the computation of summary statistics of service desk performance and created visualization.

Georgia Tech

Grader

Aug 2022 – Present

- Graded exams and assignments for Linear Algebra, Abstract Algebra, and Probability Theory at Georgia Tech

Presentations

Oct 2021: Graph Theory Seminar, Georgia Tech, Atlanta, GA

April 2022: Undergraduate Mathematics Research Conference, Georgia Tech, Atlanta, GA

Sep 2023: 2nd IACM Mechanistic Machine Learning and Digital Engineering for Computational Science and Engineering, El Paso, TX

Technical Skills

Programming: Python, Julia, Java, \LaTeX

OS: macOS, Ubuntu