

## Ziyang Qin

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**Cornell University**

Ithaca, NY

Senior, Mathematics

**Nanjing Foreign Language School**

Nanjing, CN

## Experience

**Cornell Design and Augmented Intelligence Lab**

Ithaca, NY

**Research Assistant & Summer Research Fellow**

Oct 2023 - Sep 2024

- Train and evaluate Dynamic Bayesian Networks and Bayesian networks to predict people's uncertainties under experiment circumstances.
- Developed a python toolbox library to facilitate researchers in Dynamic Bayesian Network.
- [https://github.com/qinz1yang/DAIL\\_toolbox](https://github.com/qinz1yang/DAIL_toolbox)
- Selected as recipient of the 2024 Cornell CIDS Summer Research Stipend and summer research fellow.

**Cornell MATH 4901 Supervised Reading**

Aug 2024 - Dec 2024

- Supervisor: Xin Zhou
- Topic: Differential Geometry
- 2024 Fall report: Proof to the Fary-Milnor Theorem

**Cornell MATH 4901 Supervised Reading**

Jan 2025 - May 2025

- Supervisor: Daniel L. Stern
- Topic: Measure Theory & PDE & Differential Geometry
- 2025 Spring report: Isoperimetric Inequality

**Book Assistant, *Differential Geometry and Applications***

Summer 2025

*Differential Geometry and Applications* by Richard Hamilton, Monique Chyba, and Xiaodong Cao

- Composed, typed, and formatted examples and theorem proofs in  $\text{\LaTeX}$  for the manuscript.

**Independent Reading**

Summer 2025

- Supervisor: Xiaodong Cao
- Topic: Minimal Surfaces, Ricci Flow, Riemannian Geometry.

**Cornell MATH 4901 Supervised Reading**

Aug 2025 - Dec 2025

- Supervisor: Xin Zhou
- Topic: Morse Theory

## Awards

**United States of America Mathematical Olympiad(USAMO)**

Qualifier

**United States of America Computing Olympiad(USACO)**

Gold Division

**American Regions Mathematics League(ARML)**

National Top 100 Individuals, Global Top 100 Teams

**Berkeley Maths Tournament(BMT)**

First place in power round, Fourth place in Discrete Maths part

**United Kingdom Mathematics Trust Senior Mathematical Challenge(UKMT)**

Gold Certificate

## Hobby

Photography, Tennis, Rubic's Cube(Rank 55 in Jiangsu 2017 2x2 contest)...