

CONTACT INFORMATION	<p>School of Mathematics Georgia Institute of Technology</p>	<p><i>Cell Phone:</i> (424) 521-1383 <i>Email:</i> jliu3203@gatech.edu</p>
INTERESTS	Probability Theory, Random Matrices, Spin Glasses, Percolation	
EDUCATION	<p>Georgia Institute of Technology, Atlanta, GA Ph.D. Mathematics University of Michigan, Ann Arbor, MI B.S. Honors Mathematics, with a Minor in Computer Science M.S. Mathematics</p>	<p>2024 - 2029 2020 - 2024</p>
PAPERS	<p><i>On absolutely friendly measures on \mathbb{Q}_S^d</i>, with Shreyasi Datta. Published in <i>Mathematika</i> 70 (2024), no. 3, Paper No. e12256. (arxiv)</p> <p><i>Transition densities of brownian motions on metric graphs</i> (Expository paper written as part of the Indiana REU 2023 with Professor Wai-Tong Fan) (PDF)</p> <p><i>Metric diophantine approximation on non-degenerate manifolds</i> (Expository paper written as part of the Michigan Math REU 2022 with Professor Shreyasi Datta) (PDF)</p>	
HONORS AND AWARDS	<p>Georgia Institute of Technology</p> <p>David L. Brown Fellowship GAANN Fellowship</p> <p>University of Michigan</p> <p>Donald J. Lewis Mathematical Merit Scholar Award M.S. Keeler Mathematics Merit Scholarship</p>	<p>2025 2025</p> <p>2024 2023</p>
TEACHING	<p>Georgia Institute of Technology</p> <p>Graduate Lecture Assistant</p> <ul style="list-style-type: none"> Math 3235: Probability Theory Math 6701: Math Methods of Applied Sciences <p>Graduate Teaching Assistant</p> <ul style="list-style-type: none"> Math 1552: Integral Calculus Math 1552: Integral Calculus <p>Grader</p> <ul style="list-style-type: none"> Math 7252: High Dimensional Statistics <p>University of Michigan</p> <p>Course Assistant</p> <ul style="list-style-type: none"> Math 395: Honors Analysis I Math 396: Honors Analysis II <p>Grader</p>	<p>Spring 2025 Summer 2025</p> <p>Fall 2024 Fall 2025</p> <p>Fall 2025</p> <p>Fall 2023 Winter 2024</p>

- Math 217: Linear Algebra Spring 2022
- Math 217: Linear Algebra Fall 2022
- Math 217: Linear Algebra Winter 2023
- Math 451: Advanced Calculus I Spring 2023
- Math 417: Matrix Algebra I Summer 2023
- Math 526: Discrete State Stochastic Processes Winter 2024

TALKS

I gave talks at:

- Joint Mathematics Meetings 2024
- Indiana Undergraduate Math Research Conference 2023
- University of Michigan Mathematics REU Seminar 2022

VOLUNTEERING

Math Corps

- College Assistant for Ypsilanti Math Corps, an outreach mathematics summer camp for middle school students in Summer 2024.

University of Michigan Math Circle

- Student volunteer for Math Circle, an outreach program for middle and high school students who love mathematics.

Society of Undergraduate Mathematics Students (SUMS)

- Attend monthly meetings on organizing activities and initiatives to increase engagement with mathematics majors and help create a more welcoming environment in the department.
- Led efforts to organize weekly Undergraduate Tea Time, an opportunity for math majors to socialize and relax once a week along with free tea and cookies.
- Joined the executive board as an Events Coordinator in Fall 2023.

OTHER SKILLS

Computer Science/Statistics

- Data Structures and Algorithms
- Machine Learning and Computer Vision
- Multivariate Statistical Analysis

Programming Experience

- Comfort with high-level programming languages like C++, Python, and MATLAB.
- Experience with using libraries such as NumPy, SKL, PyTorch, etc.

LANGUAGES

Native English Speaker, Fluent in Mandarin Chinese.

CITIZENSHIP

American and Taiwanese dual citizen.