

Xinran Yu

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Education

- University of Illinois at Urbana-Champaign**, Illinois 2017–present
Ph.D. in Mathematics
MS in Mathematics, May 2019
- University of Liverpool**, Liverpool, United Kingdom 2015–2017
BSc in Mathematics (with Honors), June 2017
Thesis: *Analytic Continuation and Riemann Surfaces*. Supervisor: Dr. Jon Woolf.
- Xi'an Jiaotong-Liverpool University**, Suzhou, China 2013–2015
BSc in Applied Mathematics, June 2017

Teaching & Mentoring

- Teaching Assistant**, *University of Illinois at Urbana-Champaign* 2019–Present
• Teaching Calculus II (MATH231, Spring 2021)
• Tutored undergraduate level Differential Equation course (MATH 285, Fall 2020).
• Graded for courses including Abstract Algebra and Algebraic Topology (MATH417, 418, 442, 525).
- Graduate Team Leader at Illinois Geometry Lab**, *University of Illinois at Urbana-Champaign* Fall 2019
Faculty mentor: Katelyn Leisman.
Project: *Simulating Multi-Soliton Solutions to NLS and KdV and Studying Interactions*
• Our team focused on the nonlinear Schrödinger equation (NLS) with nonzero boundary condition (NZBC) and studied the exact solution of a one-soliton solutions. We compared the solution of those with ZBC ones, and used Python to generate figures and animations for the solution.
• Duty – Held weekly discussions with student and supervised on [presentations](#), [poster](#) and [final report](#).
– Provided Python and L^AT_EX support to student participants.

Honors & Awards

- Wills Prize in Mathematics**, *University of Liverpool* July 2017
Special honor in the examination for the degree of bachelor of science with honors.
- IMA Prize**, *University of Liverpool* July 2017
Outstanding performance in the final year, offered by the Institute of Mathematics and its Applications
- University Academic Achievement Award**, *Xi'an Jiaotong-Liverpool University* 2014–2015
Top 10% of the program.

Skills

Python & R

- Attended PI4 Bootcamp and did a project regarding [goodreads book analysis](#).
- Simulated solutions of a Nonlinear Schrödinger Equation and generated graphics for the solutions.

Languages English(fluent), Japanese and German (intermediate)

Services & Enrichment

PI4 Computational Bootcamp, *University of Illinois at Urbana Champaign*

June 2020

Focused on Python and R for data science applications and did a project regarding [goodreads book analysis](#).

Staff-Student Liaison Committee Member, *University of Liverpool*

2016-2017

Worked as a course representative. Offered student perspective on the Mathematics department and contributed to improvements of the department.