

Xinran Yu

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Education

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

Teaching & Mentoring

Teaching Assistant , <i>University of Illinois at Urbana-Champaign</i> • Teaching Calculus II (MATH231, Spring 2021) and Calculus III (MATH241, Fall 2021) • Tutored undergraduate level Differential Equation course (MATH 285, Fall 2020). • Graded for courses including Abstract Algebra and Algebraic Topology (MATH417, 418, 442, 525).	2019–Present
Graduate Team Leader at Illinois Geometry Lab , <i>University of Illinois at Urbana-Champaign</i> Faculty mentor: Katelyn Leisman. Project: <i>Simulating Multi-Soliton Solutions to NLS and KdV and Studying Interactions</i> • Our team focused on the nonlinear Schrödinger (NLS) equation with nonzero boundary condition and studied the exact solution of a one-soliton solutions. We compared the solution of those with zero boundary condition, 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 ^A T _E X support to student participants.	Fall 2019

Honors & Awards

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

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.

Mathematica

Language 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.

Talks

The Yamabe Problem, *University of Illinois at Urbana Champaign* April 2021
Graduate Geometry and Topology Seminar