

EDUCATION

- University of Illinois Urbana-Champaign**
Ph.D. Student
 - **Advisor:** Jiaqi Ma
 - **Research Area:** AI Theory on Graphs & Theoretical Computer Science
 - University of Michigan**
B.Sc. in Computer Science, Summa Cum Laude
 - **Minor:** Mathematics, College of Literature, Science, and the Arts
 - Shanghai Jiao Tong University**
B.Eng. in Electrical and Computer Engineering
 - **Minor:** Computer Science, UM-SJTU Joint Institute

School of Information Science, Illinois
Aug. 2023 - Present

College of Engineering, Michigan
Aug. 2021 - May. 2023

UM-SJTU Joint Institute, Shanghai, China
Aug. 2019 - Aug. 2023

SELECTED RESEARCH EXPERIENCE

- Network Failure Detection**
Undergraduate Researcher
 - **General:** An improved algorithm on finding small balanced separator in almost linear time.
 - Deep Learning Foundation**
Undergraduate Researcher
 - **General:** Theoretical analysis on intrinsic dimension under isoperimetry assumptions, supported by SURE Program.

College of Engineering, Michigan
Mar. 2022 - Sep. 2022

College of Engineering, Michigan
Mar. 2022 - Jan. 2023

TEACHING EXPERIENCE

- EECS475 Introduction to Cryptography**
Instructional Aide
 - **General:** Hold discussion & office hour weekly for an upper-level 100+ student course on the main CS track.
 - **Topics:** Focuses on historic ciphers, symmetric encryption (pseudo-random generators, stream ciphers, pseudo-random functions/permutations), message authentication, cryptographic hash functions, and public key encryption.
 - EECS572 Randomness and Computation**
Instructional Aide
 - **General:** Hold discussion & office hour weekly for a graduate-level 70+ student course on the M.S. theory CS track.
 - **Topics:** Focuses on randomized algorithm and complexity, pseudo-random generator, applications in cryptography.
 - VV285 Honor Mathematics III**
Instructional Aide
 - **General:** Hold discussion & office hour weekly for a 150+ student rigorous analysis course on the main B.S. ECE track.
 - **Topics:** Focuses on linear algebra theory, topology, potentials and vector fields, higher derivatives, Riemann integral in \mathbb{R}^n , integration on curves and surfaces, Green, Stokes and Gauß theorem.
 - **Competition:** Hold the 1st UM-SJTU JIntegration Bee competition.
 - VV186 Honor Mathematics II**
Instructional Aide
 - **General:** Hold discussion & office hour weekly for a 200+ student rigorous analysis course on the main B.S. ECE track.
 - **Topics:** Focuses on one-variable real analysis, e.g., set theory, construction of \mathbb{R} , ϵ - δ definitions, uniform continuity, etc.

College of Engineering, Michigan
Jan. 2023 - May. 2023

College of Engineering, Michigan
Aug. 2022 - Dec. 2022

UM-SJTU Joint Institute, Shanghai, China
Mar. 2021 - Aug. 2021

UM-SJTU Joint Institute, Shanghai, China
Sep. 2020 - Dec. 2020

SELECTED HONORS AND AWARDS

- Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship**
First Prize (Ranked #2) among all HK, MC and TW students in Shanghai Jiao Tong University
 - Undergraduate Excellent Scholarship**
Third Prize among all students in UM-SJTU Joint Institute
 - Bao Gang Excellent Scholarship**
Second Prize (Ranked #3) among all Taiwan students in Shanghai Jiao Tong University
 - Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship**
First Prize (Ranked #1) among all HK, MC and TW students in UM-SJTU Joint Institute

Shanghai, China
Oct. 2021

Shanghai, China
Nov. 2020

Shanghai, China
Jun. 2020

Shanghai, China
Dec. 2019