







EDUCATION

- **University of Illinois Urbana-Champaign** Illinois
Ph.D. Student in Information Science, School of Information Science Aug. 2023 – Present
 - **Advisor:** Jiaqi Ma 
 - **Research Area:** Theoretical Artificial Intelligence & Theoretical Computer Science
- **University of Michigan** Michigan
B.Sc. in Computer Science, College of Engineering Aug. 2021 – May 2023
 - Graduate with *Summa Cum Laude*
 - **Minor:** Mathematics, College of Literature, Science, and the Arts
- **National Yang Ming Chiao Tung University** Hsinchu, Taiwan
Visiting Scholar Jan. 2020 – Jul. 2020
- **Shanghai Jiao Tong University** Shanghai, China
B.Eng. in Electrical and Computer Engineering, UM-SJTU Joint Institute Aug. 2019 – Aug. 2023
 - **Minor:** Computer Science, UM-SJTU Joint Institute

RESEARCH AND INDUSTRY EXPERIENCE






- **Theory of Computation Laboratory  , University of Michigan** Michigan
Undergraduate Researcher Mar. 2022 – Present
 - **Advisor:** Thatchaphol Saranurak 
 - Design the first almost linear time algorithm on finding minimal balanced separator.
- **SURE Program  , University of Michigan** Michigan
Undergraduate Researcher May 2022 – Apr. 2023
 - **Advisor:** Wei Hu 
 - Theoretical analysis on intrinsic dimension under isoperimetry assumptions.
- **FORESEER Research Group  , University of Michigan** Michigan
Undergraduate Research Assistant Dec. 2021 – Jan. 2023
 - **Advisor:** Jiaqi Ma 
 - Prove the asymptotic separability of a 1-layer GCN on node classification tasks.
- **Chief Noob** Shanghai, China
Backend Developer Oct. 2020 – Jun. 2021

PRE-PRINTS AND TECHNICAL REPORTS

(* denotes equal contribution)

- [P1] **Pingbang Hu**, Thatchaphol Saranurak, “Finding Minimal Balanced Separators with Detection Sets”. *Manuscript*
- [P2] **Pingbang Hu**, “Travel the Same Path: A Novel TSP Solving Strategy”. *Preprint*

TEACHING EXPERIENCE

- **Instructional Aide, University of Michigan** Michigan
Hold discussion and office hour weekly, design assignment and exam problems, grade and guide projects.
 - **Introduction to Cryptography ** : An upper-level course on the main undergraduate CS track. Winter 2023
 - **Randomness and Computation ** : A graduate-level course on the M.S. CS theory track. Fall 2022
- **Teaching Assistant, Shanghai Jiao Tong University** Shanghai, China
Hold discussion and office hour weekly, design and grade assignments and exams.
 - **Honor Mathematics III ** : An undergraduate-level course on the main B.Eng. ECE track. Summer 2021
 - * **Competition:** Hold the 1st UM-SJTU JIntegration Bee competition .
 - **Honor Mathematics II ** : An undergraduate-level course on the main B.Eng. ECE track. Fall 2020

HONORS AND AWARDS

- **Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship** Shanghai, China
First Prize (Ranked #2) among all HK, MC and TW students in Shanghai Jiao Tong University
Oct. 2021
- **Undergraduate Excellent Scholarship** Shanghai, China
Third Prize among all students in UM-SJTU Joint Institute
Nov. 2020
- **Bao Gang Excellent Scholarship** Shanghai, China
Second Prize (Ranked #3) among all Taiwan students in Shanghai Jiao Tong University
Jun. 2020
- **Hong Kong, Macao and Taiwan Overseas Chinese Student Scholarship** Shanghai, China
First Prize (Ranked #1) among all HK, MC and TW students in UM-SJTU Joint Institute
Dec. 2019