

WANG RUIJIE

✉ WANGaRuijie.github.io  [Wang Ruijie](#)  [WANGaRuijie](#)  ruijie.wang@connect.polyu.hk

EDUCATION

The Hong Kong Polytechnic University *August 2022 - Present*
Major in Computer Science, Minor in Applied Mathematics, GPA 3.67 *Kowloon, Hong Kong*

Yali High School *September 2019 - June 2022*
Track of Science for the National College Entrance Examination *Changsha, China*

EXPERIENCES

Research Assistant, The Hong Kong Polytechnic University *September 2023 - Present*
Advised by [Prof. Li Bo](#) *Kowloon, Hong Kong*

- Focus on the fair allocation problem of indivisible items.

Summer Research Intern, Simon Fraser University *May 2025 - Present*
Mentored by [Prof. Wang Yuepeng](#) *Burnaby, Canada*

- Design and implement a SQL program synthesizer for vector databases.

Service Learning: Technology Beyond Borders *December 2023 - January 2024*
Cooperation with Da Nang University of Architecture *Da Nang, Viet Nam*

- Promote STEM education in Lý Củng Un Primary School with local college students.

Exchange Student, Technical University of Denmark *May 2023 - August 2023*
Department of Applied Mathematics and Computer Science *Copenhagen, Denmark*

- Data analytics and Computational Imaging.

RESEARCH INTERESTS

Fair Division, Mechanism Design, Game Theory, and their interplay with Machine Learning, Privacy, and Blockchain; Program Synthesis and Formal Verification for Databases and AI Systems.

PAPERS

Fair Orientations: Beyond Envy-Freeness Ankang Sun, **Ruijie Wang**, Bo Li. Under review.
We introduce the study of proportionality, equitability, and their relaxations for the fair orientation model on graphs. PROP1 + fPO orientations always exist and can be computed in polynomial time, while PROP, PROPX, EQ, EQX, EQ1, and EF1 orientations may not exist and are NP-hard to decide.

HONORS & AWARDS

Dean's Honours List 2024/2025 *September 2025*
Issued by the Faculty of Engineering, The Hong Kong Polytechnic University

Mitacs Globalink Research Internship Award *February 2025*
Issued by Mitacs, Canada, for the internship at Simon Fraser University with full funding.

Dean's Honours List 2023/2024 *September 2024*
Issued by the Faculty of Engineering, The Hong Kong Polytechnic University

HKSAR Government Scholarship Fund - Reaching Out Award 2022/23 *August 2023*
Issued by the Education Bureau, Hong Kong Special Administrative Region