

Jules ZHU Haoyu

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🌐 <https://jules-zhu.github.io/>

Education Background

Sun Yat-sen University

Undergraduate, School of Mathematics (Zhuhai)

Zhuhai, Guangdong

2022 – 2027(Expected)

Research Experience

Sun Yat-sen University

College Students' Innovative Training Plan Program

Zhuhai, Guangdong

Oct. 2023 – Oct. 2024

- *Summary:* Read Stembridge's paper on Immanants and worked on problems involving integer partitions and irreducible characters of symmetric groups. This research is under the supervision of Prof. Min Huang (Sun Yat-sen University).

Peking University

PKU Algebraic Combinatorics Experience

Beijing

Jul. 2024 – Aug. 2024

- *Summary:* On Bott–Samelson rings for Coxeter groups. One can see [arxiv.org/abs/2408.10155] for details. This research lasts for 8 weeks under the supervision of Dr. Tao Gui (Peking University) and in collaboration with Lin Sun and Shihao Wang.

Sun Yat-sen University

College Students' Innovative Training Plan Program

Zhuhai, Guangdong

Oct. 2024 – Oct. 2025

- *Summary:* Comparing skein algebras and quantum cluster algebras of certain semisimple Lie algebras. This research is supervised by Prof. Min Huang (Sun Yat-sen University).

The Hong-kong University of Science and Technology

2025 Summer Research Program (on campus)

Hongkong

Jul. 2025 – Aug. 2025

- *Summary:* Studying whether $\mathcal{A} = \mathcal{U}$ for cluster algebras of type G_2 from moduli spaces of G -local systems. This research is supervised by Prof. Ivan Chi-Ho Ip (HKUST).

Skills and Miscellaneous

Programming: MATLAB, Python, C++, SageMath

Tools: LaTeX, Markdown

Languages: Mandarin (Native), English (Equivalent C1), French (DELFF B2, 2026 in Canton: 61/100)

Hobbies: Piano (ABRSM Grade 8), Chorus, Football, Movie

Honors and Awards

2023: Third Prize Scholarship.

2024: Excellent Student Cadre.