

Jia Hao Liang (Frank)

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EDUCATION

- 2025-2029 **COLUMBIA UNIVERSITY, COLUMBIA COLLEGE** New York, USA
- **Fellowship:** Science Research Fellow (Columbia Undergraduate Scholars)
 - **Courses:** Honors Math A, Data Structures in Java, Probability Theory
- 2018-2025 **PUI CHING MIDDLE SCHOOL MACAU** Macau
- GPA:** 3.97/4.00 UW; **Class rank:** 1/240; **SAT:** 1560/1600; **IELTS:** 8.5/9.0
- **STEM AP:** Calculus BC, Physics Mech/E&M, Computer Science A, Statistics
 - **Advanced Courses:** Mathematics, English, Chinese Literature

WORK AND INTERNSHIP

- Summer 2024 **INTERNATIONAL OLYMPIAD IN ARTIFICIAL INTELLIGENCE** Burgas, Bulgaria
Bronze Medalist, Macau Representative
- Explored core AI domains, including Machine Learning, Computer Vision, Natural Language Processing, and Large Multimodal Model
 - Applied concepts through hands-on problem sets in Google Colab, deploying and testing a variety of large language models in practical applications
- Spring 2025 **MACHINE LEARNING INTERNSHIP** Southern University of Science & Technology
Researcher (with Prof. Zhang Jian Guo)
- Completed coursework on Large Language Models and Transformer architectures
 - Applied Python and PyTorch to implement and experiment with AI/ML projects
- 2023-2025 **MACAU BUS PROGRAM** Macau University of Science & Technology
Developer
- Developed a mobile application that integrated variables such as real-time bus location, applying AI and algorithmic optimization to compute efficient commuter routes
 - Awarded Third Prize in the Youth AI and Future Media Global Innovation Contest
- 2023-2025 **MATH MODELING PROJECTS** Pui Ching Middle School
Group Leader, Finalist in IMMC
- Developed models for biological classification, demand forecasting, and optimization
 - Designed and implemented models using unsupervised learning and theoretical frameworks
 - Advanced to the final oral defense stage in international competition such as IMMC
- 2023-2025 **STEM COMPETITION** Macau
Macau Representative, High Achiever
- Selected to represent Macau in the International Mathematics Olympiad, International Collegiate Programming Contest, Asian Physics Olympiad, and Yau Mathcamp

AWARDS

- CS • *International:* International Olympiad in Artificial Intelligence: *Bronze (2024)*
- Math • *National:* Youth AI and Future Media Global Innovation Contest: *Third Prize (2023)*
- Math • *International:* International Mathematics Olympiad: *Honorable Mention (2025)*, Yau Mathcamp Best Project Award: *Gold (2024)*, International Mathematics Competition: *Silver (2021 & 2022)*, American Mathematics Competition: *Honor Roll & First Place (2023 & 2024)*, Stanford Math Tournament: *Calculus top10% & Geometry top25% (2024)*
- Math Modeling • *National:* Chinese Mathematical Olympiad: *Bronze (2024)*, Chinese Southeast Math Olympiad: *Bronze (2023)*, Centennial Schools Mathematics Competition: *Honorable Mention (2023)*
- Math Modeling • *International:* International Mathematical Modeling Challenge: *Finalist (2024)*, High School Mathematical Contest in Modeling: *Meritorious (2023)*
- Physics • *National:* Shanghai Joint Secondary School Math Modeling Activity: *Champion (2023)*
- Physics • *International:* Asian Physics Olympiad: *Bronze (2024)*
- Physics • *National:* Chinese Physics Olympiad: *Bronze (2023 & 2024)*
- Others • Full Scholarship for *highest rank (2023 & 2024)*, Scholarships for excellence in *Mathematics, Mathematical Modeling, English, Science, Humanities, Chinese, Physics, Chemistry, Biology, Information Technology, Geography, Bible, Arts (2021-2024)*

SKILLS

- Experienced in C++, Java, Python, Webpage Design & LaTeX
- Experienced in Algorithms, AI, Math Modeling, Mathematics & Physics