

# 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

## AWARDS AND INTERNSHIP

- Summer 2025 **INTERNATIONAL MATHEMATICAL OLYMPIAD** Sunshine Coast, Australia  
*Honorable Mention, Best Performer in Macau team*
- Best Performer in Macau Team Selection Test, IMO, China MO, and China TST
- Summer 2024 **YAU MATHCAMP** Fudan University, Shanghai  
*Best Project Award, Group leader*
- Won best project award (5 out of 70) for research on the Inverse Galois Problem
  - Selected to present research findings at the concluding Mathcamp colloquium
- 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

## LEADERSHIP

- 2021-2025 **MATH CLUB** Pui Ching Middle School Macau  
*President*
- Instructed ~30 club members, improved club operation, delivered Math talks
  - Organized Math competitions for Grade 10-12 students
- 2023-2025 **MATH MODELING CLUB** Pui Ching Middle School Macau  
*President*
- Lead team to enter several oral defense round of contests, invited to Shanghai for seminar
- 2023-2025 **BRIDGE CONSTRUCTION CLUB** Pui Ching Middle School Macau  
*Chief Designer*
- Kept team morale high during adversity, eventually navigating the team towards success
- Lead team to construct bridge with best weight capacity >100kg in club history

## SKILLS

- Experienced in C++, Java, Python, Webpage Design & LaTeX
- Experienced in Algorithms, AI, Math Modeling, Mathematics & Physics
- Piano, Rubik's Cube, Running, Route Planning, Puzzles
- Influential Transportation Content Creator ("flbjcy" on Bilibili, 20.9k+ views)