

### Education

## Massachusetts Institute of Technology Bachelor of Science

Cambridge, MA, US

Majors: Mathematics, Artificial Intelligence and Decision Making; Minor: Economics

Sep 2022 - May 2026

- **GPA**: 4.8/5.0
- Relevant Coursework: Discrete Math, Topology, Probability, Statistics, Theory of Computation, Design & Analysis of Algorithms, Machine Learning, Deep Learning, Natural Language Processing, Optimization, Microeconomics

### Experience

## Parrot Smart Learning

Shanghai, China (Remote)

Cofounder, CTO

Jul 2024 - present

- Building a smart platform powered by a Large Language Model to help elementary and middle school students prepare for math contests
- Include Artificial Intelligence tutor, student weakness identification algorithm, and study schedule optimization

Tencent Beijing, China

Artificial Intelligence Research Intern

Jun 2024 - Aug 2024

- Training on Large Language Models to solve Mathematics and Physics Olympiad problems
- Developing reward models to enhance performance in Monte Carlo Tree Search for a LLM good at math reasoning

#### MIT Computer Science & Artificial Intelligence Laboratory

Cambridge, MA, US

Research Assistant in Future Tech

Mar 2024 - present

- Determined optimal conditions for automating labor using computer vision models
- Developing a scaling law and cost-benefit estimation framework to guide industries in adopting machine learning for enhanced economic efficiency

## Pui Ching Common Room (Link)

Hong Kong, China

Cofounder

Oct 2021 - Apr 2023

- Established a pioneering social media platform dedicated in assisting high school students with academic, career development, and personal relationship queries; fostered collaboration between student groups and school officials
- Grew the platform to over 1600 active users, including students and alumni

## **Papers**

## The Johnson-Leader-Russel Question on Square Posets (<u>Link</u>)

August 2021

- An algebraic combinatorics approach to an unsolved maximal chain system problem
- Completed in the Research Science Institute with support from MIT Department of Mathematics

#### Investigation on i-commuting Probabilities on Finite Groups (Link)

August 2020

• A personal research project in abstract algebra; developed extension of the commuting probabilities on finite groups

#### Awards

### U.S. Fencing Coaches Association Academic Award

July 2024

Scholar of Distinction (student-athlete with outstanding academic performance)

# S.T. Yau High School Science Award (Mathematics)

December 2020

Silver Award (2nd worldwide)

### Chinese Girls' Mathematics Olympiad

August 2020

Bronze Medal (Hong Kong Team representative)

# Skills

Languages: English, Chinese - Madarin & Cantonese, German (beginner)

**Programming**: Python, R