

Tristan Chaang
Cambridge, MA | +1 (617) 642 1190 | tchaang@mit.edu
<https://tristanchaang.github.io>
<https://www.linkedin.com/in/tchaang>

Education

Massachusetts Institute of Technology , Cambridge, MA	September 2027
<ul style="list-style-type: none">• Candidate for Bachelor of Science in Computer Science and Engineering• Candidate for Bachelor of Science in Mathematics• Candidate for a minor in Physics• Relevant Coursework: Algorithms, Machine Learning, Electronics, Analysis, Abstract Algebra, Quantum Physics, Macroeconomics, Linguistics	GPA: 5.0/5.0 (Sophomore)
Sunway College , Kuala Lumpur, Malaysia	December 2022
<ul style="list-style-type: none">• Valedictorian, “Top in the World” and “Best Across Four Subjects” Award• Cambridge GCE A-Levels: 4 A* SAT: 1550 IELTS: 8• Coursework: Mathematics, Further Mathematics, Physics, Economics	

Experience

Teaching Assistant (TA) , EECS Department, MIT <i>UTA for 6.1210 (Algorithms)</i> <ul style="list-style-type: none">• Hold weekly office hours and recitations for the class• Proctor and grade the final exam	Fall 2024
UROP , Department of Earth, Atmospheric, and Planetary Sciences, MIT <i>GPS/GNSS Jupyter Notebook Interface for Time Series Analysis</i> <ul style="list-style-type: none">• Develop a Jupyter Notebook that allows users to utilize time position series data• Integrate data from various GPS organizations into a user-friendly interface for easier access• Outline patterns and correlations from time series data to understand changes of Earth’s surface	Spring and Summer 2024
Teaching Assistant (TA) , Department of Physics, MIT <i>UTA for 8.011 (Physics I / Classical Mechanics)</i> <ul style="list-style-type: none">• Help students during group activities• Grade problem sets on a weekly basis	Spring 2024
Undergraduate Research Opportunities Program (UROP) , Department of Mathematics, MIT <i>Investigating the Motion of Pilot-Wave Walkers in a Circular Corral</i> <ul style="list-style-type: none">• Study the behavior of droplets bouncing on a vibrating oil bath• Demonstrate the consistency of pilot-wave dynamics with quantum mechanics• Use MATLAB to model droplet dynamics and compare with experimental results	Winter 2024
Youth Stem Cup 2023 , Malaysia <i>Head of Problem Selection Committee (PSC)</i> <ul style="list-style-type: none">• Organize the first ever student-led national science Olympiad in Malaysia• Lead the PSC to: Invite problem setters, produce the exam paper, cross-check validity etc.• Successfully run the physical event with ~ 1200 participants from all over the country	Summer 2023
IMO Committee Malaysia , Malaysia <i>Trainer and Problem Selection Committee Member</i> <ul style="list-style-type: none">• Train students in the IMO Selection Camp of Malaysia• Write handouts and set problems for camp tests and IMO shortlist proposals	2021-2023
Academic Department, Kuen Cheng High School , Malaysia	2018-2023

Math Team Trainer, Math Presenter, Peer Learning Program Volunteer

- Trained and led the school team to win national first places in multiple large-scale contests
- Give talks and interactive presentations to foster mathematical interest
- Help students in academic need in math, physics and chemistry to fulfil graduation requirement

Activities & Extracurriculars

- 2024 Discover Citadel and Citadel Securities**, New York

Spring 2024

 - Explore and learn about different roles at Citadel through various activities and networking events.
- Swimming Club, Sunway College**, Malaysia

2021-2023

 - Help the committee run pool activities and teach beginners breaststroke and freestyle
- Science Week Opening Ceremony**, Kuen Cheng High School, Malaysia

2019

 - Plan and execute a large-scale performance for the annual science week
 - Successfully performed a huge elephant toothpaste demonstration

Awards & Accomplishments

- William Lowell Putnam Mathematical Competition** by MAA

2023-2024

 - Honorable Mention (Top 100)
- International Mathematical Olympiad**

2018-2022

 - Bronze Medals (2020, 2022) and Honorable Mentions (2018, 2019, 2021)
- Malaysian Physics, Computational Linguistics, and Economics Olympiads**

2020-2022

 - Silver and Bronze Medals
- Chen Jing-Run Cup Math Contest** by Xiamen University Malaysia

2017-2020

 - National Champion for 4 consecutive years

Skills & Interests

- Languages:**

Fluency in English, Mandarin Chinese, Cantonese and Malay
- Software:**

Familiarity with Python, C++, C, JavaScript, LaTeX, MATLAB, Mathematica, Adobe (Ps, Pr, Ae, Ai)
- Authored:**

“Techniques for High School Mathematics Contests” (on Google Books)
- Interests:**

Abstract Algebra, Topology, Quantum Physics, AI, Programming, Linguistics