

Tristan Chaang

Cambridge, MA | (617) 642 1190 | tchaang@mit.edu | [tristanchaang.github.io](https://github.com/tristanchaang) | www.linkedin.com/in/tchaang

Education

Massachusetts Institute of Technology , Cambridge, MA	September 2027
<ul style="list-style-type: none">• Candidate for BS in Electrical Engineering and Computer Science & Mathematics• Candidate for a minor in Physics• Relevant Coursework: Algorithms, Machine Learning, Electronics, Analysis, Abstract Algebra, Quantum Physics, Linguistics	GPA (N/A) (Freshman)

Experience

UROP , Department of Earth, Atmospheric, and Planetary Sciences, MIT <i>GPS/GNSS Jupyter Notebook Interface for Time Series Analysis</i>	Spring 2024
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- Develop a Jupyter Notebook that allows users to utilize time position series data
- Outline patterns and correlations from time series data to understand changes of Earth's surface

Undergraduate Teaching Assistant (UTA) , Department of Physics, MIT <i>UTA for 8.011 (Physics I / Classical Mechanics)</i>	Spring 2024
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- Help students during group activities and grade problem sets on a weekly basis

Undergraduate Research Opportunities Program (UROP) , Department of Mathematics, MIT <i>Investigating the Motion of Pilot-Wave Walkers in a Circular Corral</i>	Winter 2024
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- Study the behavior of droplets bouncing on a vibrating oil bath
- Use MATLAB to model droplet dynamics and compare with experimental results

Youth Stem Cup 2023 , Malaysia <i>Head of Problem Selection Committee (PSC)</i>	Summer 2023
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- 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.

IMO Committee Malaysia , Malaysia <i>Trainer and Problem Selection Committee Member</i>	2021-2023
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- Train students in the IMO Selection Camp of Malaysia
- Write handouts and set problems for camp tests and IMO shortlist proposals

Academic Department, Kuen Cheng High School , Malaysia <i>Math Team Trainer, Math Presenter, Peer Learning Program Volunteer</i>	2018-2023
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- 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
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Activities & Extracurriculars

Swimming Club, Sunway College , Malaysia	2021-2023
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- Help the committee run pool activities and teach beginners breaststroke and freestyle

Science Week Opening Ceremony , Kuen Cheng High School, Malaysia	2019
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- Plan and execute a large-scale performance for the annual science week
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Awards & Accomplishments

William Lowell Putnam Mathematical Competition by MAA	Fall 2023
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- Honorable Mention (Top 100)

International Mathematical Olympiad	2018-2022
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- Bronze Medals (2020, 2022) and Honorable Mentions (2018, 2019, 2021)

Malaysian Physics, Computational Linguistics, and Economics Olympiads	2020-2022
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- Silver and Bronze Medals
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Skills & Interests

Languages: Fluency in English, Mandarin Chinese, Cantonese and Malay

Software: Familiarity with Python, C++, LaTeX, MATLAB, Mathematica, Adobe (Ps, Pr, Ae, Ai)

Books: "Techniques for High School Mathematics Contests" (on Google Books)

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