

Jonathan Huang

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Education

- Massachusetts Institute of Technology** (GPA: 5.0/5.0) 08/2021 – present
- M.Eng student in Electrical Engineering and Computer Science
 - S.B., Electrical Engineering and Computer Science (2025), Biology (2025)
 - Selected EECS Coursework: Advanced Algorithms (6.521), Circuit Design (6.208), Convex Optimization (6.722), Digital Design (6.205, 6.S965), OS (6.181), RF (6.230), Statistical Inference (6.780, 6.781), VLSI (6.601)
 - Other Selected Coursework: Immunology (7.23), Mammalian Development and Genetics (7.82), Quantum Computation (8.370), Quantum Physics III (8.06), Theory of Probability (18.675)

Selected Projects

- FPGA-based GPS Receiver** Fall 2025
- Read navigation data from GPS signals post-acquisition on the Xilinx RFSoC.
- Takelma Language Dictionary** 2025
- Designed a dictionary website with Next.js for the Cow Creek Band of Umpqua Tribe of Indians.
- FPGA-based Vowel Detector** Fall 2024
- Built a real-time speech recognition device for vowels on the Real Device Urbana Board.
- RF Spectrophotometer** Spring 2023
- Built a cavity resonator and antenna to measure the concentration of sugar solution.

Work Experience

- Jane Street** | Quantitative Trading Intern 06/2025 – 08/2025
- Developed models and strategies to maximize returns in various markets.
- Coley Lab** | Undergraduate Researcher 11/2023 – 01/2025
- Investigated computational approaches to efficiently search combinatorial synthesis libraries.
- Weng Lab** | Undergraduate Researcher 06/2022 – 10/2023
- Investigated the synthesis pathway and industrial production of withanolides.

Publications

- Reynolds, E., Trauger, M., Li, F.S., **Huang, J.**, Moss, T., Christ, B., Xu, M., Knoch, E. and Weng, J.K. Elucidation of gene clusters underlying withanolide biosynthesis in ashwagandha through yeast metabolic engineering. bioRxiv, pp.2024-12.

Awards

International Olympiad of Linguistics Gold Medal (Rank 3 individual)	2021
USA Biolympiad Silver Medalist (Top 8)	2021
USA Junior Math Olympiad Honorable Mention (Top 24)	2019

Teaching

MIT 18.404 (Theory of Computation) Teaching Assistant	Fall 2023, 2024, 2025
MIT 18.701 (Algebra I) Teaching Assistant	Fall 2022

Activities

MIT Quizbowl Vice President (2025)	08/2021 – present
MIT Science Bowl Tournament Director, NSB Regional Coordinator (2025)	08/2021 – present
Next House Exec Board	01/2022 – 01/2025
NACLO Training Committee Problem Reviewer	08/2021 – 08/2024