

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 | Quantative 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

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| 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

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

Activities

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| 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 |