Brandon Wang

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EDUCATION

Massachusetts Institute of Technology (MIT)

• Candidate for M.Eng., B.S. Computer Science and Molecular Biology

Expected Graduation: 2024

Cambridge, MA, GPA: 5.0/5.0

• Advanced coursework: Information Theory (6.441), Distributed Algorithms (6.852), Advanced Algorithms (6.854), Immunology (7.23), Evolution and Genomics of Infectious Disease (1.881), Algorithms for Machine Learning (18.408 S23)

AWARDS/HONORS

William Lowell Putnam Competition N1 (Rank 12)	2022
International Math Olympiad Gold Medal (Rank 15 individual, top national team)	2019
USA Math Olympiad Winner (Rank 7 (2018), 1 (2019), 1 (2020))	2018-2020
USA Computing Olympiad Finalist (Top 24)	2017
NCTE Certificate of Superior Writing (National Council of Teachers of English, top 210)	2019

PUBLICATIONS

- 2. H. Shi, Y. He, Y. Zhou, J. Huang, K. Maher, **B. Wang**, Z. Tang, S. Luo, P. Tan, M. Wu, Z. Lin, J. Ren, Y. Thapa, X. Tang, K. Chan, B. Deverman, H. Shen, A. Liu, J. Liu, and X. Wang (2023). Spatial Atlas of the Mouse Central Nervous System at Molecular Resolution. *Nature*. https://doi.org/10.1038/s41586-023-06569-5.
- 1. P. Loh, H. Cai, F. Campos, J. Choi, T. Chu, D. Dijour, B. Huffman, M. Jaffer, Z. Scully, **B. Wang**, L. Wang, P. Wang (2021). Crowdsourced Contact Tracing. US Patent Application 2021/0400428.

TEACHING

MIT 18.C06 (Linear Algebra and Optimization) | Teaching Assistant

Fall 2023

June 2021, 2022

Math Olympiad Program | Head Teaching Assistant

Coordinated grading efforts across team of teaching assistants

· Graded and provided feedback on student papers and taught classes to top high school mathematicians

EXPERIENCE

Jane Street Capital | Quantitative Trading Intern

May 2023-August 2023

• Investigated strategies to maximize returns in various markets

New York, NY

Personalis, Inc. | Bioinformatics Engineering Intern

June 2021-August 2021

Devised and implemented novel algorithms (Python, Bash) for analyzing Homologous Repair Deficiency in tumor samples

NOVID | Technical Advisor (Backend Engineering)

June 2020-December 2021

- Devised high-performance algorithms (C++, Python, Protocol Buffers) that process network data for over 100,000 users
- Analyzed user analytics to inform strategy and iOS design

Math Olympiad Program | Virtual RA/Events Co-Coordinator

July 2020

• Organized social activities and ensured participant well-being at virtual program

ACTIVITIES AND SERVICE

MIT Lecture Series Committee (LSC) | Projectionist, Webmaster

February 2022-

Handling technical and logistical details of putting on cinema-quality movies

USA Computing Olympiad | Problem Staff

January 2023-

USA Math Olympiad | *Problem Writer/Reviewer*

November 2020-

REFERENCES (contact information available upon request)

Jason Harris, Vice President of Bioinformatics Engineering at Personalis Po-Shen Loh, Professor of Mathematics at CMU and founder of NOVID