# **Brandon Wang**

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#### **EDUCATION**

# Massachusetts Institute of Technology (MIT)

2024

• S. B. Computer Science and Molecular Biology

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), Multiagent Learning (6.S890 F23)

# **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**

- 3. M. Ghaffari, **B. Wang**. Lenzen's Distributed Routing Generalized: A Full Characterization of Constant-Time Routability. 56th ACM Symposium on Theory of Computing (STOC '24), 2024.
- 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. Spatial Atlas of the Mouse Central Nervous System at Molecular Resolution. *Nature*, 2023. 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. Crowd-sourced Contact Tracing. 2021. US Patent 11950163.

#### **TEACHING**

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

Fall 2023

Math Olympiad Program | Instructor (prev. Head Teaching Assistant)

June 2021, 2022, 2024

- Taught classes to top high school mathematicians
- (Previously: Coordinated grading efforts across team of teaching assistants to provide feedback and scores on student exams)

### **WORK 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—December 2023

• 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-