Brandon Wang

US Citizen ● `br-wa.github.io` ● brwa@alum.mit.edu

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

Last updated 18 November 2024

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—**