

Brandon Wang

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EDUCATION

Massachusetts Institute of Technology (MIT)

Expected Graduation: 2024

- Candidate for M.Eng., B.S. 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)

AWARDS/HONORS

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| 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 Application 2021/0400428](#).

TEACHING

- | | |
|---|------------------------|
| MIT 18.C06 (Linear Algebra and Optimization) <i>Teaching Assistant</i> | Fall 2023 |
| Math Olympiad Program <i>Head Teaching Assistant</i> | June 2021, 2022 |
| • Coordinated grading efforts across team of teaching assistants | |
| • Graded and provided feedback on student papers and taught classes to top high school mathematicians | |

EXPERIENCE

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| Jane Street Capital <i>Quantitative Trading Intern</i> | May 2023–August 2023
<i>New York, NY</i> |
| • Investigated strategies to maximize returns in various markets | |
| Personalis, Inc. <i>Bioinformatics Engineering Intern</i> | June 2021–August 2021 |
| • Devised and implemented novel algorithms (Python, Bash) for analyzing Homologous Repair Deficiency in tumor samples | |
| NOVID <i>Technical Advisor (Backend Engineering)</i> | 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 <i>Virtual RA/Events Co-Coordinator</i> | July 2020 |
| • Organized social activities and ensured participant well-being at virtual program | |

ACTIVITIES AND SERVICE

Last updated 27 September 2023

MIT Lecture Series Committee (LSC) | *Projectionist, Webmaster*

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

February 2022—

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