

# Danielle Wang

Curriculum Vitae

## PERSONAL DETAILS

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| <i>Address</i> | 4238 Monet Circle, San Jose CA, 95136   |
| <i>Birth</i>   | June 6, 1997  |
| <i>e-mail</i>  | diwang@mit.edu  |
| <i>Website</i> | <a href="https://danielleywang.github.io">https://danielleywang.github.io</a> |

## EDUCATION

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**PhD Candidate** Expected in 2024  
*Massachusetts Institute of Technology*  
Candidate for PhD in Mathematics from the Massachusetts Institute of Technology. Advisor:  
Wei Zhang.

**Bachelor of Science** 2019  
*Massachusetts Institute of Technology*  
B.S. in Mathematics from the Massachusetts Institute of Technology.

## PUBLICATIONS AND PREPRINTS

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Wang, D. (2023). *Twisted Gan–Gross–Prasad conjecture for unramified quadratic extensions*. <https://arxiv.org/abs/2307.15234> Submitted.

Vemulapalli, S. and Wang, D. (2021). *Uniform bounds for the number of rational points on symmetric squares of curves with low Mordell–Weil rank*. <https://arxiv.org/abs/1708.07057> *Acta Arithmetica*, **199**(4) 331–359.

Wang, D. (2019). *The Eulerian distribution on involutions is indeed  $\gamma$ -positive*. <https://arxiv.org/abs/1808.08481> *Journal of Combinatorial Theory Series A*, **165** 139–151.

Berger, A. and Wang, D. (2019). *Modified Erdős–Ginzburg–Ziv Constants for  $\mathbb{Z}/n\mathbb{Z}$  and  $(\mathbb{Z}/n\mathbb{Z})^2$* . <https://arxiv.org/abs/1808.08486> *Discrete Mathematics*, **342**(4) 1113–1116.

Wang, D. (2019). *On roots of Wiener polynomials of trees*. <https://arxiv.org/abs/1807.10967> *Discrete Mathematics*, **343**(1) 111643.

## INVITED TALKS (SEMINARS AND CONFERENCES)

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|---|--------------|
| Banff Workshop “Branching Problems for Representations of Real, P-Adic and Adelic Groups” | July 2024    |
| Texas Oklahoma Representations and Automorphic forms XIII                                 | April 2024   |
| AIM Workshop “Arithmetic intersection theory on Shimura varieties”                        | January 2024 |
| Duke Number Theory Seminar  | Oct 4, 2023  |
| BC NT/RT seminar  | Oct 28, 2023 |
| Johns Hopkins Number Theory Seminar   | Sep 9, 2023  |
| Arizona Algebra and Number Theory Seminar   | Mar 28, 2023 |

## FELLOWSHIPS AND AWARDS

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| MSRI Lauter Graduate Fellow              | 2023       |
| Alice T. Schafer Prize Runner-Up         | 2019       |
| NSF Graduate Fellowship                  | 2019       |
| MIT Presidential Fellow                  | 2019       |
| William Lowell Putnam Competition N1     | 2018       |
| Elizabeth Lowell Putnam Award            | 2015, 2018 |
| USA Mathematical Olympiad (USAMO) Winner | 2015       |

## TEACHING AND WORK EXPERIENCE

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|   |                |
|---|----------------|
| <b>Teaching Assistant</b><br><i>18.510</i><br>Graded for the class 18.510 Intro to Mathematical Logic and Set Theory at MIT during Fall 2023                                | Fall 2023      |
| <b>Teaching Assistant</b><br><i>18.02</i><br>Taught recitation for the introductory class 18.02 Multivariable Calculus at MIT during Fall 2022.                             | Fall 2022      |
| <b>Study Group Leader (Virtual)</b><br><i>Arizona Winter School</i><br>Led a virtual study group during the 2022 Arizona Winter School on automorphic forms beyond $GL_2$ . | Mar 5 – 9 2022 |
| <b>Mentor</b><br><i>Directed Reading Program</i>  | January 2022   |

Mentored a pair of undergraduate students for the Directed Reading Program offered by the MIT math department.

**Mentor**

June – August 2020

*UROP+*

Mentored a student in a combinatorics research project for UROP+, an undergraduate research program offered by the MIT math department.

**Teaching Assistant**

June 2016, 2018, 2019

*Math Olympiad Summer Program*

Graded for the Math Olympiad Summer Program, the training camp for the USA International Math Olympiad (IMO) team.

**Instructor**

July – August 2017

*A-Star Summer Math Camp*

Taught the Pre-MathCounts class at the A-Star Summer Math Camp in 2017.

**Instructor**

December 2015

*A-Star Winter Math Camp*

Taught the USAMO/USAJMO class at the A-Star Winter Math Camp in 2015.