

Victor Wang

EDUCATION

Harvard University

Ph.D. in Mathematics (expected May 2027), advised by Lauren Williams

University of British Columbia

B.Sc. Honours in Mathematics (May 2022), cumulative average: 99/100
Recipient of the Governor General's Silver Medal (valedictorian)

HONOURS AND AWARDS

- | | |
|------------|---|
| 2022 | Dr. R. D. James Medal in Mathematics
Awarded to the graduating student whose record and promise in Mathematics are considered to be the most outstanding. |
| 2022 | NSERC Canada Graduate Scholarship - Master's (declined) |
| 2021 | Daniel Buchanan Scholarship in Mathematics
Offered to the student who gains the highest standing in the third year of an Honours in Mathematics. |
| 2021 | Dorothy and Arthur Holt Scholarship |
| 2021 | Mo Lin Yu Memorial Prize in the Faculty of Science
Awarded to the top academic student who has completed their third year in the Faculty of Science. |
| 2020, 2021 | Charles and Jane Banks Scholarship |
| 2020 | Computer Science Scholarship |
| 2020 | David Shum Memorial Prize in Computer Science |
| 2020 | Greer Family Scholarship |
| 2020, 2021 | NSERC Undergraduate Student Research Award |
| 2020 | Joseph P. Ruffel Scholarship in Science
Offered to a male student who has an outstanding academic record and shows promise of success in his chosen field. |
| 2019 | Dean and Kitty Toye Scholarship in Science |
| 2019 | Joel Harold Marcoe Memorial Scholarship |
| 2019 | Marie Kendall Memorial Scholarship in Science |
| 2019–2021 | Stanley M. Grant Scholarship in Mathematics |
| 2019–2021 | Trek Excellence Scholarship for Continuing Students |
| 2018 | Mathematics Entrance Scholarship |
| 2018 | Presidential Scholars Major Entrance Scholarship |
| 2018 | Canadian Mathematical Olympiad Honourable Mention |
| 2017 | United States of America Mathematical Olympiad Qualifier |

PUBLICATIONS AND PREPRINTS

Deletion-contraction for a unified Laplacian and applications, with Farid Aliniaefard and Stephanie van Willigenburg, [arXiv:2110.13949](https://arxiv.org/abs/2110.13949)

The chromatic symmetric function of a graph centred at a vertex, with Farid Aliniaefard and Stephanie van Willigenburg, [arXiv:2108.04850](https://arxiv.org/abs/2108.04850).

P-partition power sums, with Farid Aliniaefard and Stephanie van Willigenburg, *European Journal of Combinatorics*, Volume 110 (2023).

Extended chromatic symmetric functions and equality of ribbon Schur functions, with Farid Aliniaefard and Stephanie van Willigenburg, *Advances in Applied Mathematics*, Volume 128 (2021).

RESEARCH INTERESTS	Algebraic/enumerative combinatorics and algebraic/spectral graph theory, including: cluster algebras, combinatorial Hopf algebras, dimer models, graph polynomials, the Laplacian, matroids, partially-ordered sets, the sandpile group, symmetric functions.	
TALKS AND PRESENTATIONS	<p><i>The chromatic symmetric function of a graph centred at a vertex</i>, Canadian Discrete and Algorithmic Mathematics Conference, Winnipeg, MB. (June 2023)</p> <p><i>Deletion-contraction for a unified Laplacian and applications</i>, Workshop on Matroids and Tropical Combinatorics, London, UK. (January 2023)</p> <p><i>On a conjecture of Stanley and Stembridge</i>, Harvard Trivial Notions Seminar, Cambridge, MA. (October 2022)</p> <p><i>P-partition power sums</i>, Waterloo Algebraic and Enumerative Combinatorics Seminar, online. (May 2022)</p> <p><i>Deletion-contraction for a unified Laplacian and applications</i>, Algebraic Graph Theory Seminar, online. (April 2022)</p> <p><i>Deletion-contraction for a unified Laplacian and applications</i>, UBC Discrete Math Seminar, online. (January 2022)</p> <p><i>Deletion-contraction for a unified Laplacian and applications</i>, Graduate Online Combinatorics Colloquium, online. (November 2021)</p> <p><i>Extended chromatic symmetric functions and equality of ribbon Schur functions</i>, Canadian Undergraduate Mathematics Conference, online. (August 2021)</p> <p><i>Variations on the Laplacian</i>, UBC Student Research Seminar, online. (July 2021)</p> <p><i>The chromatic symmetric function of a graph centred at a vertex</i>, UBC Student Research Seminar, online. (June 2021)</p> <p><i>Extended chromatic symmetric functions and equality of ribbon Schur functions</i>, UBC Discrete Math Seminar, online. (March 2021)</p> <p><i>Chromatic symmetric functions in the e-basis</i>, UBC Math Circle, online. (March 2021)</p> <p><i>A chromatic coincidence</i>, UBC-UIUC Combinatorics Meeting, online. (January 2021)</p> <p><i>Weighted trees with equal chromatic symmetric functions</i>, UBC Student Research Seminar, online. (June 2020)</p>	
TEACHING EXPERIENCE	<p>Spring 2021 Undergraduate Teaching Assistant, Honours Integral Calculus</p> <p>Winter 2020 Undergraduate Teaching Assistant, Honours Differential Calculus</p> <p>Winter 2020 Undergraduate Teaching Assistant, Intro to Computer Systems</p> <p>Winter 2019 Undergraduate Teaching Assistant, Software Construction</p>	
OTHER EMPLOYMENT	<p>Summer 2019 Software Engineer Intern, Google LLC</p> <p>Summer 2018 Software Engineer Intern, Tableau Software</p>	
RELEVANT SKILLS	C, C++, Java, JavaScript, \LaTeX , MATLAB, Python, Racket, Sage, TypeScript	