
EDUCATION	<p>University of Washington, Seattle Sept 2018 – Present Ph.D. student in Computer Science and Engineering Research interests: algorithms, combinatorics, convex optimization Advisor: Yin Tat Lee</p> <p>University of Waterloo June 2018 B. Math. <i>with Distinction – Dean’s Honours List (Highest Honours)</i> Majors: computer science, combinatorics & optimization, and jointly pure math</p> <p>Graduate-level course highlights: algorithms, convex optimization, probabilistic combinatorics, probability, cryptography, statistical machine learning, combinatorial optimization, graph theory, quantum computations, Lebesgue integrals and Fourier analysis.</p>
PUBLICATIONS AND PREPRINTS	<p>A Nearly-Linear Time Algorithm for Linear Programs with Small Treewidth: A Multiscale Representation of Robust Central Path. with Yin Tat Lee and Guanhao Ye. <i>Proceedings of the 53rd ACM Symposium on Theory of Computing (STOC)</i>, 2021. Invited to SICOMP Special Issue. https://arxiv.org/abs/2011.05365.</p> <p>Computing Circle Packing Representations of Planar Graphs. with Yin Tat Lee and Kent Quanrud. <i>Proceedings of the 31st ACM-SIAM Symposium on Discrete Algorithms (SODA)</i>, 2020. https://arxiv.org/abs/1911.00612.</p> <p>Improved Bounds for Rota’s Basis Conjecture. with Jim Geelen. <i>Combinatorica</i>, 2019. https://arxiv.org/abs/1709.00075. Polymath 12.</p> <p>Modeling Temporal Effects in Re-captured Video. P. Schaber, S. Dong, B. Guthier, S. Kopf, W. Effelsberg. <i>Proceedings of the 23rd ACM International Conference on Multimedia</i>, 2015.</p>
TALKS	<p>“Computing Circle Packing Representations of Planar Graphs.” <i>Theory Seminar</i>. University of Washington, Apr 2020. <i>Theory Tea</i>. EPFL, Switzerland, Feb 2020. Conference presentation, SODA, Jan 2020.</p> <p>“A Short Introduction to Flag Algebras.” <i>Theory Lunch</i>. University of Washington, Nov 2019.</p> <p>“Improved Bounds for Rota’s Basis Conjecture.” <i>Theory Lunch</i>. University of Washington, Feb 2019. <i>Graphs and Matroids Seminar</i>. University of Waterloo, Apr 2018.</p>
TEACHING ASSISTANTSHIPS	<p>Sketching Algorithms, University of Washington Jan – Mar 2021 Algorithms, University of Washington Apr – Jun 2020 Calculus 2, University of Waterloo Jan – Apr 2017</p>

	Introduction to Combinatorics, University of Waterloo	May – Aug 2015
	Algebra, University of Waterloo	Sept – Dec 2014
AWARDS	NSERC (Canadian NSF equivalent) Postgraduate Scholarship	2021
	NSERC Alexander Graham Bell Canada Graduate Scholarship (Declined)	2021
	Jessie W.H. Zou Memorial Award, University of Waterloo	2018
	Awarded to one student annually in the Faculty of Math for excellence in undergraduate research (with advisor nomination).	
	NSERC Undergraduate Research Award	2016, 2017
	President’s Scholarship of Distinction, University of Waterloo	2013
	Suncor Energy Inc. Emerging Leaders Award, University of Waterloo	2013
	Top entrance scholarship for students in a traditional engineering discipline.	
WORKSHOPS	Swiss Winter School on Theoretical Computer Science, EPFL	Feb 2020
	Mathematics of Machine Learning, MSRI	Aug 2019
	Hausdorff School on Combinatorial Optimization, University of Bonn	Aug 2018
	Prague Summer School on Discrete Math, Charles University	Jul 2018
	Introduction to Graph Limits, Eötvös Loránd University	Jun 2018
	Structures in Graphs and Matroids (SiGMa), University of Waterloo	Jul 2017
	Integer Programming and Combinatorial Optimization (IPCO) Workshop	Jun 2017
INDUSTRY EXPERIENCE	Amazon , Seattle, WA	Sept – Dec 2017
	Software Engineering Intern	
	Intentional Software , Bellevue, WA	Sept – Dec 2015
	Software Engineering Intern	
SERVICE	External reviewer for FOCS, SODA, ESA	
	Reviewer for Annals of Combinatorics	
LANGUAGES	C/C++, Java, C#, Scheme, Matlab, Mandarin (native), German (intermediate)	