## Ethan R. Partida

Contact Information	School of MathematicsEmail: ethan_partida[at]brown[dot]eduBrown UniversityWeb: ethanpartida.github.ioProvidence, RI 02903
INTERESTS	Algebraic Combinatorics, Algebraic Geometry, Combinatorial Optimization
Core Skills	Python (SAGE, NumPy), Macauly2, C, Julia, Technical Writing
Education	Brown University, Providence, Rhode Island USA Ph.D. student in Mathematics, Expected Spring 2027
	University of Minnesota, Minneapolis, Minnesota USA Bachelor's degree in Mathematics, May 2022
	Bachelor's degree in Computer Science, May 2022
Papers	Shifted and threshold matroids. In preparation.
	On the topology of conormal complexes and posets of matroids. Submitted
	Playing Cribbage with Reinforcement Learning and Minimax. University of Minnesota Conservancy
	Computing Rational Powers of Monomial Ideals. Journal of Symbolic Computation, Volume 116, 2023
Community Involvement	Brown DRP, DRP Mentor, Spring 2023-Current
	Brown Horizons, Reading Group Organizer, Spring 2023
	OURFA <sup>2</sup> M <sup>2</sup> , Experiences Panel Panelist, Fall 2022
	University of Minnesota, Undergraduate Mathematics Research Seminar, Organizer, Fall 2021
	University of Minnesota, Mathematics Project at Minnesota, Peer Mentor, Fall 2021
	University of Minnesota, SMART Learning Commons, Peer Tutor, Summer 2020-2022
	University of Minnesota, North Star STEM Alliance, Member, Fall 2019-2022
	Farmington School District, Paraprofessional and Volunteer, Fall 2017-2022
Awards	<ul> <li>Ronald E. McNair Scholar</li> <li>3M Diversity Scholarship</li> <li>National Hispanic Scholarship Fund Recipient</li> <li>Prof. Hans H. Dalaker Mathematics Undergraduate Scholarship</li> <li>William H. Burgum College of Science and Engineering Scholarship</li> <li>MN Space Grant Recipient</li> <li>MAA 2021 Outstanding Student Paper Presentation</li> <li>JMM 2021 Honorable Mention Poster</li> <li>Texas State Rapid Fire Research Winner</li> </ul>

Presentations	h-vectors : A tour of simplicial complexes, shellability and Stanley-Reisner theory
	Brown Student Seminar, September 2022 UMN Student Combinatorics and Algebra Seminar, January 2022
	Simon's Conjecture and Decomposability
	Joint Mathematics Meetings, PME Poster Session, April 2022 Texas State Graduate Expo, Five Minute Talks Session, November 2021 Young Mathematicians Conference, Student Talks, August 2021
	Real Powers of Monomials Ideals
	MAA Mathfest, Student Paper Session, August 2021 Brown University's SUMS, Student Presentation, March 2021 Joint Mathematics Meetings, MAA Poster Session, January 2021
	Symmetry of a Pastry: A Mathematical Investigation into the Braid Group University of Minnesota, McNair Scholars Research Symposium, August 2020
Teaching	<b>Brown University</b> Teaching Assistant MATH 90 Calculus I, Fall 2023