Ethan R. Partida

Contact Information

School of Mathematics
University of Minnesota
Providence, RI 02903

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Interests Algebraic Combinatorics, Algebraic Geometry

Core Skills Python (SAGE, NumPy), Macauly2, C, Julia, Technical Writing

Education

Brown University, Providence, Rhode Island USA
Ph.D. student in Mathematics

University of Minnesota, Minneapolis, Minnesota USA
Bachelor's degree in Mathematics, May 2022

Bachelor's degree in Computer Science, May 2022

Papers

Playing Cribbage with Reinforcement Learning and Minimax. Undergraduate Research Scholarship 2022. University of Minnesota Conservancy

Real Powers of Monomial Ideals. Polymath 2020. *Journal of Symbolic Computation*, Volume 116, 2023

Research Experience

Texas State REU, *Simon's Conjecture and Decomposablility*, Participant, 2021

Polymath REU, *Monomials, Convex Bodies and Optimization*, Participant, 2020

McNair Scholars Program, *Symmetry of a Pastry: A Mathematical Investigation into the Braid Group*, McNair Scholar, 2020

Undergraduate Research Scholarship, *Playing Cribbage with Reinforcement Learning and Minimax*, Scholarship Recipient, 2019-2022

Community Involvement

OURFA²M², 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

Ronald E. McNair Scholar
3M Diversity Scholarship
National Hispanic Scholarship Fund Recipient
Prof. Hans H. Dalaker Mathematics Undergraduate Scholarship
William H. Burgum College of Science and Engineering Scholarship
MN Space Grant Recipient
MAA 2021 Outstanding Student Paper Presentation
JMM 2021 Honorable Mention Poster
Texas State Rapid Fire Research Winner
University Dean's List
Taylor Student Project Fund Recipient

Presentations

Schuberty Schuberts: A tale of intuition before rigor

UMN Directed Reading Program, April 2022

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

BRIDGES Conference, Poster Session, June 2022
Joint Mathematics Meetings, Polymath Jr Special Session, January 2022
MAA Mathfest, Student Paper Session, August 2021
Undergraduate Math Research Seminar, April 2021
Brown University's SUMS, Student Presentation, March 2021
Joint Mathematics Meetings, MAA Poster Session, January 2021
Undergraduate Mathematics Symposium, Poster Session, November 2020
Texas State Graduate Expo, Five Minute Talks Session, November 2020

Symmetry of a Pastry: A Mathematical Investigation into the Braid Group

University of Minnesota, McNair Scholars Research Symposium, August 2020

Academic Experience

Mathematics Project at Minnesota, Participant, January 2020

Anderson Labs, Taylor Student Project Fund, Smart Mirror Creator (physical and software), Fall 2019