

Ethan Partida

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Education

Bachelor of Mathematics

College of Science and Engineering, University of Minnesota-Twin Cities
MN

Expected May 2022
Minneapolis,

Cumulative GPA: 3.92, Technical GPA: 4.00

Bachelor of Computer Science

College of Science and Engineering, University of Minnesota-Twin Cities
Cumulative GPA: 3.92, Technical GPA: 3.94

Expected May 2022
Minneapolis, MN

Awards

- College of Science and Engineering Honors Program
- Ronald E. McNair Scholar
- 3M Diversity Scholarship
- Undergraduate Research Scholarship
- Taylor Student Project Fund Recipient
- National Hispanic Scholarship Fund Scholar
- University Dean's List
- North Star STEM Alliance First Year Scholar
- Walmart Foundation Scholar

Research Experience

Undergraduate Research Scholar, Office of Undergraduate Research September 2019-Present
University of Minnesota-Twin Cities Minneapolis, MN

- Awarded a scholarship to participate in self-led undergraduate research
- Sought out and proposed research topic to university professor James Moen
- Wrote and edited a research proposal
- Studied and applied machine learning techniques to create a cribbage playing computer program
- Gained experience reading research literature
- Used python along with libraries such as NumPy and TensorFlow

PolyMath REU, PolyMath Project June 2020-August 2020
University of Minnesota-Twin Cities Minneapolis, MN

- Worked in a completely digital research environment
- Collaborated closely with peers and professor Alexandra Seceleanu on research
- Developed tools to better understand rational powers of monomial ideals using Macaulay2

Academic Experience

Participant, Directed Reading Program (DRP)

January 2020-May 2020

University of Minnesota-Twin Cities

Minneapolis, MN

- Read and discussed a mathematics textbook alongside a graduate student
- Studied Category Theory by reading Brendan Fong and David Spivak's *Seven Sketches in Compositionality: An Invitation to Applied Category Theory*

Scholar, TRIO McNair Scholars program

May 2020-Present

University of Minnesota-Twin Cities

Minneapolis, MN

- Participated in graduate school preparation and professional development program for underrepresented minorities
- Worked closely with professor Victor Reiner on a paper introducing braid groups and their applications
- Developed a cohort of driven and like minded peers who have inspired me to push my academic and professional limits

Participant, Coxeter Groups Reading Group

June 2020-August 2020

University of Minnesota-Twin Cities

Minneapolis, MN

- Participated in a summer graduate reading group led by professor Victor Reiner
- Studied Coxeter Groups from a combinatorial perspective by reading Anders Björner and Francesco Brenti's *Combinatorics of Coxeter Groups*

Participant, Mathematics Project at Minnesota

November 2019-January 2020

University of Minnesota-Twin Cities

Minneapolis, MN

- Participated in math conference for students from underrepresented groups which gave exposure to math research and life as a graduate student
- Practiced communicating scientific ideas by reading and then giving an accessible presentation on a recent math paper published in the SIAM Undergraduate Research Journal
- Paired with and worked closely with a graduate student in professional development activities such as meeting Industry Mathematicians and attending math talks given by Postdoctoral Fellows

Project Creator, Taylor Student Project Fund

September 2019-December

2019

University of Minnesota-Twin Cities

Minneapolis, MN

- Was awarded and managed funds to create a project using the university's makerspace
- Created "Smart Mirror" which displayed personalized day to day information about its user
- Wrote custom software to display information from the website *MyStudyLife*

- <https://github.com/ethanpartida/MMM-MyStudyLife>

Student, Post-Secondary Enrollment Options (PSEO)

September 2017-May 2019

University of Minnesota-Twin Cities

Minneapolis, MN

- Applied to and was accepted into the PSEO program at the University of Minnesota Twin-Cities
- Completed a full academic year of classes during senior year of high school

Member, Tesla Works

September 2019-Present

University of Minnesota-Twin Cities

Minneapolis, MN

- Collaborated and worked under senior members of Tesla Works to create a winter light show for the university
- Cooperatively bug fixed and added features to software which controls and syncs music to lights

Community Involvement

Member, North Star Stem Alliance

September

2019-Present

University of Minnesota-Twin Cities

Minneapolis, MN

- Member of group focused on raising graduation rates for underrepresented minorities in STEM
- Attended monthly professional and personal developmental conferences
- Coordinated with group leaders to learn more about the process of academic research

Paraprofessional and Volunteer, Riverview Elementary School

December 2017-January

2020

Farmington School District

Farmington, MN

- Volunteered and worked with third grade students over the course of the full school year to better inspire kids through STEM activities