

## Eduardo Torres Davila

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CONTACT INFORMATION	University of Minnesota Department of Mathematics Office: Vincent Hall 424	Cell: (707) 230-7500 Email: <a href="mailto:torre680@umn.edu">torre680@umn.edu</a> Website: <a href="https://etdavila10.github.io">etdavila10.github.io</a>
EDUCATION	2020 – present <b>University of Minnesota</b> PhD in Mathematics	
	2016 – 2020 <b>San Diego State University</b> BS in Applied Mathematics Minor: Computer Science	
AWARDS	College of Science & Engineering Graduate Fellowship (2020 – 2023)	
PUBLICATIONS	<i>Numerical semigroups, polyhedra, and posets II: locating certain families of semigroups</i> , with Jackson Autry, Abigail Ezell, Tara Gomes, Christopher O'Neill, Christopher Preuss, & Tarang Saluja, <i>Advances in Geometry</i> . (doi)( <a href="https://arxiv.org/abs/1912.04460">arXiv:1912.04460</a> )	
PREPRINTS	<i>Numerical semigroups, polyhedra, and posets III: minimal presentations and face dimension</i> , with Tara Gomes & Christopher O'Neill, <b>submitted</b> . ( <a href="https://arxiv.org/abs/2009.05921">arXiv:2009.05921</a> )	
	<i>Visualizing the support of Kostant's weight multiplicity formula for the rank two Lie algebras</i> , with Pamela E. Harris, Marissa Loving, Juan Ramirez, Joseph Rennie, Gordon Rojas Kirby, & Fabrice O. Ulysse, <b>submitted</b> . ( <a href="https://arxiv.org/abs/1908.08405">arXiv:1908.08405</a> )	
CONFERENCES /PROGRAMS ATTENDED	AWM Research Symposium, Minneapolis, Minnesota, June 2022 GradMoCCA, Minneapolis, Minnesota, May 2022 Semigroups, Generating functions, and Polytopes (SGPs) Research Seminar Joint Math Meetings, Denver, Colorado, January 2020 <ul style="list-style-type: none"><li>• Undergraduate Poster Session (Honorable Mention)</li></ul> Field Of Dreams, St. Louis, Missouri, November 2019 SACNAS National, Honolulu, Hawaii, October 2019 Math Alliance Facilitated Graduate Applications Process (F-GAP)	
MENTORSHIP /TEACHING EXPERIENCE	Summer 2022 <i>PolyMath Jr. REU Assistant Mentor.</i>	
	Spring 2022 <i>Graduate Teaching Assistant: Math 1271 - Calculus I.</i> Department of Mathematics, University of Minnesota.	

MATHEMATICS RESEARCH EXPERIENCE	Summer 2020	<i>Funded Research in Combinatorial &amp; Commutative Algebra.</i> <b>Advisor:</b> Christopher O'Neill, Department of Mathematics, San Diego State University.
	2019 – 2020	<i>Funded Research in Polyhedral Geometry.</i> <b>Advisor:</b> Christopher O'Neill, Department of Mathematics, San Diego State University.
	Summer 2019	<i>REU in Applied Combinatorics &amp; Discrete Mathematics (MSRI-UP).</i> Mathematical Science Research Institute, Berkeley, CA, USA. <b>Advisor:</b> Pamela E. Harris, Department of Mathematics, Williams College.
	Spring 2019	<i>Research in Numerical Semigroups.</i> <b>Advisor:</b> Christopher O'Neill, Department of Mathematics, San Diego State University.
TALKS /PANELS	University of Minnesota, Mathematics of Climate Seminar, July 2022	<i>The fundamental theorem of dynamical systems</i>
	University of Minnesota, Women in Math, February 2022	<i>Completing your core requirements panel</i>
	University of Minnesota, Math Club, November 2021	<i>Research experience for undergraduates panel</i>
	San Diego State University, SGPs Resarch Seminar, September 2020	<i>Minimizing minimal presentations</i>
	San Diego State University, SGPs Research Seminar, March 2020	<i>Minimal presentations of Kunz posets</i>
	Mathematical Sciences Research Institute, MSRI-UP, July 2019	<i>Visualizing the support of Kostant's weight multiplicity formula for the rank two Lie algebras</i>
WRITING CONTRIBUTIONS	<i>Networking Basics for Math Undergrads</i> , with Joanne Beckford, Alex Christensen, Pamela E. Harris, Lucy Martinez, & Fabrice O. Ulysse, e-Mentoring Network in the Mathematical Sciences - connecting students and mentors. AMS Blogs. July 21, 2020.	
	<i>Bank of REU/Grad Fair Questions</i> , with Pamela E. Harris & Lucy Martinez, e-Mentoring Network in the Mathematical Sciences - connecting students and mentors. AMS Blogs. January 24, 2020.	
RELEVANT SKILLS	Technical Skills:	Macaulay2, Python, SageMath, Git
	Soft Skills:	Mentoring/Teaching, Bilingual (English/Spanish)