Asten Fallavollita

pri7@txstate.edu | (210) 251-1918 |San Marcos, Texas USA | asten.neocities.org

Education

Texas State University **San Marcos, TX**

M.S. in Mathematics Fall 2024 - May 2026

- Pure Math concentration. Completed master's thesis in Set Theory without the Axiom of Foundation.
- GPA: 4.0

B.S. in Mathematics Fall 2021 - Spring 2024

- Graduated summa cum laude with a major in Mathematics and a minor in Computer Science.
- Completed graduate-level coursework in Abstract Algebra and Algebraic Topology.
- GPA: 4.0

Experience

Logic@TXST **Texas State University**

Research Assistant Fall 2023 - May 2026

- Participating in an NSF-funded research fellowship in Mathematical Logic led by Dr. Will Boney at both undergraduate and graduate level.
- Co-organizing the weekly Logic Student Seminar.

Department of Mathematics **Texas State University**

Instructor / Teaching Assistant Spring 2022 - May 2026

- Served as Instructor of Record for freshman-level mathematics survey course and Elementary Statistics.
- Led problem-solving sessions as a Teaching Assistant for Pre-Calculus, Calculus I & II.
- Completed 3 semesters of Math Graduate Instructor Training.

Student Learning Assistance Center **Texas State University**

Tutor Fall 2021 - Fall 2022

- Tutored university students in subjects including College Algebra, Calculus, Intro to Proof, Chemistry, and Physics.
- Received College Reading and Learning Association Master-Level tutoring certification.

Presentations

Mid-Atlantic Mathematical Logic Seminar **Rutgers University**

- "Non-Foundational Set Theory and Superuniversality" (5 minute lightning talk) . . . September 27, 2025

Logic@TXST Student Seminar **Texas State University**

- "An Introduction to Boffa's Superuniversality Axiom" . . . . . Feb 25, 2026
- "Set Theory and CW Complexes" . . . . . Sep 10, 2025
- "A Friendly Introduction to ZFC Set Theory" . . . . . Oct 3, 2024
- "The Foundations of Non-Foundational Set Theory" . . . . . Sep 5, 2024

Topology Seminar **Texas State University**

"Fun With CW Complexes" . . . . . Oct 17, 2025

Talk Math 2 Me Student Seminar **Texas State University**

- "A Friendly Introduction to a Scary Axiom: Exploring the Axiom of Choice". . . . . Nov 1, 2024
- "Easy as ABC? Examining One of the Most Tortured Conjectures in Number Theory" . . . Feb 2, 2024
- "The Merten's Conjecture" . . . . . Apr 27, 2023

Awards

- TXST Outstanding Achievement Award for Mathematics Master's Students 2026
- TXST Talk Math 2 Me Outstanding Speaker Award 2025
- TXST Outstanding Achievement Award for Mathematics Undergraduates 2024
- Ross & Sarah Wayment Endowed Scholarship ($1,200) 2024
- Denison-Koehn Endowed Scholarship in Science ($1000) 2024
- Mathworks Undergraduate Fellowship ($1,000) 2023
- Patti Strickel Harrison Scholarship ($2,500) 2023
- Heloise Bowles Memorial Scholarship ($4,200) 2023
- Don and Helen Cude Award for Achievement in Mathematics ($1,000) 2022
- Ram Lal Seekri Endowed Scholarship in Mathematics ($200) 2022
- Mabel Dugger Endowment ($1,300) 2021

Organizations

- Mentor for **Texas State Math Directed Reading Program** Fall 2025 - May 2026
    - Meeting weekly with undergraduate math students to facilitate self-study in Linear Algebra.
- Vice President and Mentor for **SUPER (Supporting Undergraduates for Powerful Equitable Results in Math)** at Texas State Fall 2024 - May 2026
    - Serving as a personal mentor for two 2 undergraduate math students from underrepresented backgrounds in STEM.
    - Recruiting math students from diverse backgrounds to create mentor / mentee pairs and increase undergraduate student support.
- Member of **Pi Mu Epsilon Honor Society** Spring 2023 - Present

Relevant Coursework

- Advanced Set Theory
- Topics in Infinity Category Theory
- Algebraic & Point Set Topology
- Graph Theory
- Group & Field Theory
- Real Analysis

Skills

- LaTeX proficiency
- C++ and Python programming
- Tap dance