

Department of Mathematics
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Education

- Ph.D., Mathematics**, Univ. of Colorado Boulder Spring 2018
- Advisor: Prof. Ágnes Szendrei
 - Thesis: [Hardness Results for the Subpower Membership Problem](#)
 - Certificate in College Teaching Spring 2018
- M.S., Mathematics**, Purdue University Fort Wayne 2010
- B.A., Chemistry**, Hope College 2007
- Minor in Mathematics
 - *Summa Cum Laude*

Employment History

- Assistant Professor**, Colorado State Univ. Spring 2020 – Present
- Department of Mathematics
- Adjunct Professor**, University of Denver Summer 2019 – Winter 2020
- Department of Computer Science
 - Online instructor
- Math Instructor**, Aims Community College, Early College Academy Fall 2019
- Department of Mathematics
- Technical Services Representative**, Epic Systems, Madison, WI August 2018 – June 2019, June 2010 – July 2012
- Support healthcare software for healthcare facilities
 - Involves programming, debugging, problem solving, and communicating technical information
- Graduate Teaching Assistant/Instructor**, Univ. of Colorado Boulder Fall 2012 – Spring 2018
- Department of Mathematics
- Graduate Teaching Assistant/Instructor**, IPFW Fall 2008 – Spring 2010
- Department of Mathematics
- Undergraduate Research Assistant**, Hope College Summer 2005
- Studied kinetics of the sodium/glucose transport system (SGLT1) and the chloride/cystine transporter (system x_c^-)
 - Interdisciplinary project in biochemistry and mathematics

Honors and Awards

Univ. of Colorado Boulder

- Certificate in College Teaching
- 2017 Burton W. Jones Teaching Excellence Award
- 2016-2017 Adele V. Leonhardy Mem. Scholarship
- 2013 W.E. Briggs Teaching Excellence Award

Epic Systems

- Rookie of the Year Award

Hope College

- Presidential Scholarship
- Jaecker Chemistry Scholarship
- Pfizer Chemistry Scholarship
- Phi Beta Kappa
- Pi Mu Epsilon
- Kleinheksel Mathematics Award
- Sigma Xi Senior Research Award
- Dean's List

Teaching

Instructor of Record

College Algebra	7 terms
Pre-calculus	2 terms
Pre-calculus (online)	2 terms
Calc. for Bio. Scientists	9 terms
Calc. for Bio. Scientists (online)	6 terms
Calc. for Bio. Scientists II	2 terms
Math for Computational Science	1 term
Applied Math for Chemists II	1 term
Business Calculus	1 term
Business Calculus (online)	1 term
Calculus 1	5 terms
Calculus 2	2 terms
Statistics	1 term
Math for Liberal Arts	1 term
Lin. Alg./Discrete Math (online)	2 terms
Linear Algebra	1 term
Linear Algebra (online)	1 term
Ordinary Differential Equations	1 term
Partial Differential Equations	1 term
Advanced Calculus of One Variable	1 term
Coding and Information Theory	1 term
Supervised College Teaching	1 term
Math of Sustainability	1 term
Accessible and Inclusive Electronic Content	3 week session

Teaching Assistant

Finite Math	1 term
Calculus 1	1 term
Calculus 2	3 terms

Course Coordinator

Calc. for Bio. Scientists 4.5 years

Teaching Portfolio

Accessible STEM Content Specialist, Colorado State Univ. Summer 2025 – Present

- Created the *Accessibility Guide for STEM Content*
- Served as a resource for faculty in making course documents more accessible
- Facilitated the Best Practices in Teaching Course for faculty on accessible and inclusive electronic content through the Institute for Teaching and Learning
- Facilitated in-person consultations on accessibility topics in content creation, such as using document headings

Course Creator, Colorado State Univ. Spring 2025

- Created Math 112, *Mathematics of Sustainability*
- Created open source course materials using PreTeXt and Doenet, *Mathematics of Sustainability*

Course Coordinator, Colorado State Univ. Summer 2020 – Fall 2024

- Coordinated large enrollment courses serving approximately 400 students per semester
- Organized course structure and developed course components, including an open educational resource
- Managed multiple course instructors
- Managed undergraduate learning assistants

Math Lead ENcourage Program, Colorado State Univ. Summer 2021, 2022

- Planned curriculum and developed several Desmos activities and instructional videos for a week long intensive program for incoming engineering majors that did not place “Calculus ready”
- Led review and tutoring sessions with the goal of helping students place into and be successful in Calculus I

Data Science Master’s Program, Univ. of Denver Summer 2019 – Winter 2020

- Adjunct instructor for online mathematics courses for the Master’s in Data Science program

Tutoring Fall 2012 – Spring 2018

- Various tutoring experiences, including Fall 2005 – Spring 2010
 - Algebra, Calculus, Organic Chemistry
 - Online tutoring with Tutor.com
 - Tutoring undergraduate mathematics students in a drop-in help room

Continuing Education Program, Univ. of Colorado Boulder Fall 2016 – Spring 2017

- The mission of the Division of Continuing Education is to provide quality, innovative, lifelong learning opportunities to a diverse student population by extending the educational resources of the University of Colorado Boulder.
- Instructed online and evening sessions of Pre-calculus

Integrated Teaching and Learning Program, Univ. of Colorado Boulder Spring 2016

- Helped prepare and deliver a mathematics session for high school outreach programs

Guest Lecturer, Univ. of Colorado Boulder Spring 2015

- Presented a guest lecture for MATH 5810, Chemical Topology, on the the graph theoretic result of Kuratowski’s Theorem

Student Academic Success Center (SASC), Univ. of Colorado Boulder Fall 2014

- SASC is a multi-cultural academic learning community, serving low income and first generation college students with academic skills development, math and writing courses, supplementary instruction in gateway courses, tutoring, pre-collegiate opportunities and graduate research opportunities.

- Instructed college algebra, managed three undergraduate instructor assistants, and held 8 week evaluation meetings with students to assess and manage their goals and progress

Pre-collegiate Development Program (PCDP), Univ. of Colorado Boulder Summer 2014

- PCDP is an academic enhancement program for targeted middle and high school students. It is designed to motivate and prepare first generation students in pursuit of their higher education goals.
- Designed and instructed an algebra course meant to prepare students for calculus
- Wrote a supplementary text for the course
- Was invited as a presenter at Saturday academies for middle school program participants

Learning Community Instructor, IPFW Fall 2009

- Learning communities are designed to help incoming freshmen integrate into the college community and provide a smaller environment with their peers.
- Instructed college algebra
- Planned and directed extra-curricular activities outside of the classroom with the purpose of building community

Upward Bound Program, Hope College Summer 2008

- Upward Bound is an educational opportunity outreach program that seeks to motivate and support students from disadvantaged backgrounds, namely low-income, first-generation students.
- Served as a tutor and advisor for the high school summer program

Research Papers

- [1] Shriner, Jeff, Hardness Results for the Subpower Membership Problem, *Internat. J. Algebra Comput.* **28**(5) (2018) 719-732.

Public Writing

- [1] *Local Story*. Shoutout Colorado guest article, July 16, 2025.
- [2] *Accessibility Guide for STEM Content*. Educator guide, Summer 2025.
- [3] *Mathematics of Sustainability*. Open educational resource, Spring 2025.
- [4] *Calculus for Biological Scientists*. Open educational resource, Summer, 2022.
- [5] *The creative process of mathematics*. Daily Camera guest opinion article, August 25, 2017.
- [6] *A Novice IBL Blog*. Contributing author, Fall 2016 – Spring 2017.

Presentations

- [1] *Hardness Results for the Subpower Membership Problem*. Joint Mathematics Meetings, MAA Contributed Paper Session on Algebra, San Diego, CA. January 2018.
- [2] *An NP-complete Example for the Subpower Membership Problem*. Graduate Algebra Seminar, Univ. of Colorado Boulder. December 2017.
- [3] *Hardness Results for the Subpower Membership Problem*. Spring Southeastern AMS Sectional Meeting, Special Session on Algebras, Lattices, and Varieties, College of Charleston. March 2017.

- [4] *NP-hardness Results for the Subpower Membership Problem*. Graduate Algebra Seminar, Univ. of Colorado Boulder. February 2017.
- [5] *The Dollar Game and the Critical Group of a Graph*. Graduate Algebra Seminar, Univ. of Colorado Boulder. April 2014.
- [6] *Kinetic Studies of the Na^+ /Glucose Transport System SGLT1, and the Chloride/Cystine Transporter System x_c^-* . REU poster presentation, Hope College. Fall 2005.

Grants

- [1] *Faculty Success Program, \$12,000*. Individual funding and funding for four graduate students for travel and participation in MathFest 2023. Spring 2023.
- [2] *Faculty Success Program, \$5,000*. Individual funding and funding for one graduate student for travel and participation in MathFest 2022. Spring 2022.

Workshops and Conferences Attended

Teaching

- [1] *Best Practices: Accessible and Inclusive Electronic Content*. The Institute for Learning and Teaching, Colorado State Univ. June 2025.
- [2] *Accessible Course Materials with PreTeXt*. MathTech.org, virtual. May 2025.
- [3] *Best Practices: Create Assignments*. The Institute for Learning and Teaching, Colorado State Univ. January 2025.
- [4] *Best Practices: Critical Thinking*. The Institute for Learning and Teaching, Colorado State Univ. May 2024.
- [5] *MathFest*. 2023 Annual Meeting, Tampa, FL. August 2023.
- [6] *Best Practices: Inclusive Pedagogy*. The Institute for Learning and Teaching, Colorado State Univ. June 2023.
- [7] *Best Practices: Student Motivation*. The Institute for Learning and Teaching, Colorado State Univ. January 2023.
- [8] *MathFest*. 2022 Annual Meeting, Philadelphia, PA. August 2022.
- [9] *MathFest*. 2021 Annual Meeting, Project NExT, virtual. August 2021.
- [10] *Joint Mathematics Meetings*. 2021 Annual Meeting, virtual. January 2021.
- [11] *MathFest*. 2020 Annual Meeting, Project NExT, virtual. July 2020.
- [12] *Summer Convening*. Student Experience Project, virtual. July 2020.
- [13] *Best Practices: Engage Students in Your Online Course*. The Institute for Learning and Teaching, Colorado State Univ. June 2020.
- [14] *Joint Mathematics Meetings*. 2018 Annual Meeting, San Diego, CA. January 2018.
- [15] *IBL Workshop*. Academy of Inquiry Based Learning, Univ. of Colorado Boulder. August 2016.
- [16] *IBL Workshop*. Academy of Inquiry Based Learning, California Polytechnic State University. June 2016.

Research

- [1] *Joint Mathematics Meetings*. 2018 Annual Meeting, San Diego, CA. January 2018.
- [2] *Spring Southeastern AMS Sectional Meeting*. Special session on Algebras, Lattices, and Varieties, College of Charleston. March 2017.
- [3] *Structure and Complexity in Universal Algebra*. A workshop on open problems, Vanderbilt University. September 2016.
- [4] *Front Range Logic Saturday*. A conference on research related to the foundation of mathematics and logic, Colorado School of Mines. September 2016.
- [5] *Algebra and Algorithms*. A conference on constraint satisfaction, structure theory and computation in algebra, Univ. of Colorado Boulder. May 2016.
- [6] *Association for Symbolic Logic*. 2014 Annual Meeting, Univ. of Colorado Boulder. May 2014.

Memberships

Present

Project NExT, Brown dot 2020 Fellow

Mathematical Association of America (MAA)

National Center for Faculty Development and Diversity (NCFDD)

National Association of Mathematicians (NAM), Colorado State Univ. faculty representative

Past

Student Experience Project (SEP), Colorado State Univ., Summer 2020 – Spring 2021

Service and Community Involvement

Committee on VITAL Faculty, Mathematical Association of America Summer 2026 – Present

- Committee member

Annual Evaluation Committee, Colorado State Univ. Spring 2026 – Present

- Department of Mathematics

Teaching and Mentoring Awards Committee, Colorado State Univ. Fall 2025 – Present

- Committee member to determine awards for the College of Natural Sciences

Inclusive Physical and Virtual Campus Committee, Colorado State Univ. Fall 2025 – Present

- Virtual subcommittee member

Accessibility Sprint Volunteer, Colorado State Univ. Summer 2025

- The Institute for Teaching and Learning
- Volunteer facilitator for in-person consultations on accessibility topics in content creation, such as using document headings

- Owner and Baker, Wild Wheat & Whisky.** Summer 2024 – Present
- Sourdough microbakery and teaching kitchen
 - Sell and donate sourdough bread locally in Fort Collins
 - Developing curriculum for teaching sourdough baking in a home kitchen
- Non-profit board member, The Handwork Initiative.** Spring 2024 – Summer 2025
- Diversity, Equity, and Inclusion Committee, Colorado State Univ.** Spring 2021 – Spring 2024
- Department of Mathematics
 - Served as a committee member
- Math Day Volunteer, Colorado State Univ.** Fall 2023 – 2025
- Proctored the mathematics fair for participating high school students and teachers
- Association for Women in Mathematics, Colorado State Univ.** Fall 2020 – Spring 2021
- Served as a mentor
- Math Jam, Colorado State Univ.** Summer 2020
- Served as a volunteer for the Math Jam middle school outreach summer camp
- Graduate Peer Mentoring Program, Univ. of Colorado Boulder** Fall 2017 – Spring 2018
- Initiative of the Graduate School and United Government of Graduate Students (UGGS) to offer non-crisis guidance and support to members of the graduate student community
 - Served as a mentor across disciplines
- Refugee Homework Club, Lafayette, CO** August 2017 – May 2018
- Served as a tutor for a refugee community from Thailand
- Mathematics Graduate Mentoring Program, Univ. of Colorado Boulder** Fall 2015 – Spring 2016
- Served as a graduate student mentor within mathematics department