

## Education

- **University of Nebraska-Lincoln** Lincoln, NE  
*Ph.D. in Mathematics* Dec. 2020
  - Dissertation: *Spectral Properties of a Non-compact Operator in Ecology*
  - Advised by Dr. Richard Rebarber and Dr. Brigitte Tenhumberg
- **University of Nebraska-Lincoln** Lincoln, NE  
*M.S. in Mathematics* May 2017
- **University of Colorado Boulder** Boulder, CO  
*Post-Baccalaureate Teacher Licensure in Secondary Mathematics* Dec. 2013
- **University of Colorado Boulder** Boulder, CO  
*B.A. in Mathematics* May 2012

## Selected Employment

- **University of Colorado Boulder - Dept. of Applied Mathematics** Boulder, CO  
*Assistant Teaching Professor* Aug. 2023 to Current
  - Courses taught include Calculus 1, 2, & 3 for Engineers, and Statistical Methods and Applications I.
- **University of Colorado Boulder - The BOLD Center** Boulder, CO  
*Faculty Fellow* Aug. 2024 to Current
  - Tutored students in Precalculus through Differential Equations during weekly drop-in hours; held exam review sessions; interviewed and mentored undergraduate tutors.
- **US Army Corps of Engineers - Geospatial Research Laboratory** Alexandria, VA  
*Research Mathematician* Feb. 2021 to June 2023
  - **Enhanced Terrain Processing:** Lead developer of deep-learning models which perform land-cover classification of high-resolution imagery.
  - **Acoustic Deterrence of Invasive Carp:** Lead developer of movement models to determine the effects of acoustic deterrents on carp behavior.
- **US Army Corps of Engineers - Geospatial Research Laboratory** Alexandria, VA  
*NSF Mathematical Sciences Graduate Intern* Jun. 2020 – Aug. 2020
  - **Enhanced Terrain Processing:** Developed deep-learning models to remove noise from synthetic-aperture radar (SAR) imagery.
- **University of Nebraska-Lincoln** Lincoln, NE  
*Graduate Teaching Assistant* Aug. 2015 – Dec. 2020
  - Taught courses as the instructor-of-record, directed recitation sessions, and tutored in the Mathematics Resource Center.
- **Daewoo Elementary School** Geoje-si, Republic of Korea  
*Head Elementary English Teacher* Feb. 2014 – Feb. 2015
  - Taught four English lessons daily to 1<sup>st</sup> through 6<sup>th</sup>-grade students
  - Organized English-language initiatives and acted as the liaison between English teachers and school administrators

## Publications

- [1] M. Reichenbach, R. Rebarber, and B. Tenhumberg, “Spectral properties of a non-compact operator in ecology,” *Journal of Mathematical Biology*, no. 50, 82 2021.

## Service and Involvement

- **Grants Committee Member** Dec. 2024 to Current  
*Mathematical Association of America Rocky Mountain Section*

- **Applied Math Department Representative** Aug. 2024 to Current  
*Boulder Faculty Assembly* Boulder, CO  
– Member of the Faculty Affairs Committee from Oct. 2024 to Current.
- **High school tutor** Apr. 2022 to Aug. 2022  
*Northstar Tutors* Washington, DC
- **Chapter President** Sep. 2019 to Sep. 2020  
*UNL Graduate Chapter of the American Mathematical Society* Lincoln, NE
- **Tutor for Native American high-school students** Aug. 2019 to Mar. 2020  
*Lincoln Public Schools* Lincoln, NE
- **Project mentor** Aug. 2019 to May 2020  
*UNL Math Dep. Directed Reading Program* Lincoln, NE
- **STAAR Seminar Co-organizer** Aug. 2019 to Aug. 2020  
*University of Nebraska-Lincoln Math Dept.* Lincoln, NE
- **Volunteer** Jan. 2017 to Jan. 2020  
*National Conference for Undergraduate Women in Mathematics* Lincoln, NE
- **Mentor to First-Year Graduate Students** Aug. 2018 to May 2020  
*University of Nebraska-Lincoln Math Dept.* Lincoln, NE
- **Representative to Graduate Student Advisory Board** May 2016 to May 2018  
*University of Nebraska-Lincoln Math Dept.* Lincoln, NE
- **UNL Math Day Volunteer** Nov. 2015 to Dec. 2020  
*University of Nebraska-Lincoln Math Dept.* Lincoln, NE

## Awards

- **Award for Outstanding Achievement in Student Outreach** ERDC  
*Awarded for excellence in mentoring student interns* April, 2023
- **ERDC Award for Outstanding Team Effort** ERDC  
*Awarded to the Enhanced Terrain Processing team* April, 2022
- **Linda Bors Fellowship** UNL Math Dept.  
*Awarded to three graduate students annually for excellence in research* Fall 2018
- **Steven Hataaja Award** UNL Math Dept.  
*Awarded for excellent exposition by a graduate student* Spring 2018
- **Robert Noyce Teacher Scholarship** CU Boulder Dept. of Education  
*NSF-funded merit scholarship* Spring 2013 & Fall 2013
- **Dean's List** CU Boulder  
*Awarded to students with semester GPA greater than 3.75* Spring 2010, Sp. 2013, & Fall 2013

## Presentations

- **American Fisheries Society Annual Meeting** Spokane, WA  
*Modeling the Effects of Acoustic Signals on Invasive Carp Behavior (20 min.)* Aug. 2022
- **ERDC RD22 Conference** Remote  
*Modeling the Effects of Deterrents on Carp Behavior (20 min.)* Apr. 2022
- **Math Club, University of Nebraska-Kearney** Remote  
*"Modeling Ecological Populations" (50 min.)* Oct. 2020
- **Math Department Colloquium, Creighton University** Omaha, NE  
*"Integral Projection Models in Mathematical Biology" (50 min.)* Dec. 2019

- **Augustana University Math Club** Sioux Falls, SD  
*“Population Models in Mathematical Biology” (50 min.)* Nov. 2018
- **Colorado Council of Teachers of Mathematics Annual Conference** Denver, CO  
*“The Impact of Inquiry-Based Teaching in Two High School Math Classrooms”* Oct. 2013

## Professional Memberships

Mathematical Association of American (MAA).