Elizabeth Spaulding

elizabeth.spaulding@colorado.edu

EDUCATION

University of Colorado Boulder — May 2025 (expected)
Ph.D. in Computer Science
Advisor: James H. Martin
GPA: 4.0/4.0

University of Nebraska-Lincoln — May 2019
B.S. in Mathematics
Minors in Computer Science, Spanish
GPA: 4.0/4.0

HONORS AND AWARDS

Dean's Summer Research Fellowship — May 2020
- Fellowship awarded to outstanding incoming PhD students at CU-Boulder

NASA Nebraska Space Grant Fellowship — August 2017
- Competitive research grant for research in STEM fields

Dean's List, University of Nebraska-Lincoln — August 2015 - May 2019

High Scholar, University of Nebraska-Lincoln — August 2015 - May 2019
- Award given to students in the top 10% of their class

Undergraduate Creative Activities and Research Experience — August 2016
- University of Nebraska-Lincoln UCARE grant for undergraduate research

University of Nebraska Honors Program — August 2015 - May 2019

University of Nebraska Regents Scholarship — August 2015
- Full tuition scholarship to UNL

EXPERIENCE

Graduate Teaching Assistant — August 2019 - Present
CU-Boulder Department of Computer Science
CSCI 1300: Starting Computing and CSCI 2270: Data Structures
- Teach students programming and data structures in C++
- Lead weekly recitation, answer student questions, and grade students' homework
- Hold weekly office hours and interview grading
- Create and proofread homework problems
- From August 2020, serve as a Lead TA. Organize instructional team and delegate weekly tasks

Part-time Research Assistant — June 2020 - Present
CU-Boulder Department of Computer Science
DARPA AIDA Project - RAMFIS
- Write Python scripts to post-process data annotation into a revised annotation scheme
- Create and proofread spreadsheets of draft proposals for the Cross-Program Ontology

- Collaborate with other students and professors on the Ontology team to find a mapping from the Cross-Program Ontology to the Wikidata Ontology
- Write code to improve results on the RAMFIS cross-document co-reference pipeline

Undergraduate Researcher   August 2017 - May 2019

UNL Department of Mechanical and Materials Engineering

Theoretical and computational studies of wake turbulence

Advisors: Dr. Jae Sung Park, Dr. Adam Larios
- Funded by NASA Nebraska Space Grant Fellowship
- Studied theoretical fluid dynamics with an emphasis on boundary layer theory and flow separation
- Modeled fluid flow in Matlab and FEniCS

Learning Assistant   August 2017 - December 2017

UNL Department of Mathematics

College Algebra and Trigonometry
- Guided students' learning by answering relevant questions and encouraging mathematical discussion
- Modeled the approach of a successful math student

Undergraduate Researcher   August 2016 - May 2017

UNL Department of Special Education and Communication Disorders

The effect of visual context on the perception of sinusoidal speech

Advisor: Dr. Thomas Carrell
- Funded by UNL Undergraduate Creative Activities and Research Experience
- Designed experiment to test speech perception with visual context

ACTIVITIES

UNL Aerospace Club - Rocketry Team   August 2016 - May 2019
- Design and manufacture high-power rocket according to specifications set by competition each year
- Research relevant concepts in aerodynamics, physics, and fluid dynamics to optimize rocket design
- Design and program relevant software to specifications set by competition each year

UNL Aerospace Club - Treasurer   May 2018 - May 2019
- Manage funds from different sources for five different teams in club
- Design and maintain budget
- Communicate with campus financial offices to ensure club's good standing

UNL Pi Mu Epsilon Math Club   August 2017 - May 2019
- Attend lectures by distinguished mathematicians from across the country
- Honor given to high-achieving undergraduate Mathematics majors

UNL Honors Program Student Advisory Board   November 2017 - May 2019
- Facilitate communication between honors students and faculty
- Promote community engagement of honors students through event planning and outreach

UNL Math Day, *Volunteer*   November 2017
- Volunteered at Nebraska-wide high school level math competition

CONFERENCES
ATTENDED

Nebraska Conference for Undergraduate Women in Mathematics   January 25, 2019
University of Nebraska-Lincoln
- Presentation: "Boundary Layer Separation in Turbulent Fluids"

Nebraska Academy of Sciences Conference, *Nebraska Wesleyan*   April 20, 2018
- Poster presentation: "Theoretical and computational studies of wake turbulence"

GROW Conference, *Northwestern University*   October 13, 2017
- Awarded travel grant to attend

TECHNOLOGY
SKILLS

Programming Languages:
- *Proficient:* C++, Java, Python.
- *Some proficiency:* C, Matlab, PHP.

Markup Languages: LaTeX, HTML/CSS, XML.

Applications: Excel, Presentation software, Eclipse, FEniCS, Photoshop.