

# Elizabeth Spaulding

elizabeth.spaulding@colorado.edu

EDUCATION	University of Colorado Boulder Ph.D. in Computer Science Advisor: James H. Martin GPA: 4.0/4.0	May 2025 (expected)
	University of Nebraska-Lincoln B.S. in Mathematics Minors in Computer Science, Spanish GPA: 4.0/4.0	May 2019
HONORS AND AWARDS	Dean's Summer Research Fellowship • Fellowship awarded to outstanding incoming PhD students at CU-Boulder	May 2020
	NASA Nebraska Space Grant Fellowship • Competitive research grant for research in STEM fields	August 2017
	Dean's List, University of Nebraska-Lincoln	August 2015 - May 2019
	High Scholar, University of Nebraska-Lincoln • Award given to students in the top 10% of their class	August 2015 - May 2019
	Undergraduate Creative Activities and Research Experience • University of Nebraska-Lincoln UCARE grant for undergraduate research	August 2016
	University of Nebraska Honors Program	August 2015 - May 2019
	University of Nebraska Regents Scholarship • Full tuition scholarship to UNL	August 2015
EXPERIENCE	Graduate Teaching Assistant CU-Boulder Department of Computer Science <i>CSCI 1300: Starting Computing and CSCI 2270: Data Structures</i> • 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. Additional duties include organizing instructional team and delegating weekly tasks	August 2019 - Present
	Part-time Research Assistant CU-Boulder Department of Computer Science <i>DARPA AIDA Project - RAMFIS</i> • Write Python scripts to post-process data annotation into a revised annotation scheme • Develop Java code for my team's entity, event, and relation clustering pipeline • Create and proofread draft proposals for the Cross-Program Ontology	June 2020 - Present

- Collaborate with other students and professors on the Ontology team to find a mapping from the Cross-Program Ontology to the Wikidata Ontology

#### **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  
*University of Nebraska-Lincoln*

January 25, 2019

- 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.

**Tools:** PyTorch, Tensorflow, Keras, Scikit-Learn, Pandas, spaCy, NLTK.

**Markup Languages:**  $\LaTeX$ , HTML/CSS, XML.

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