

---

## Mitchell Piehl

---

St. Paul, Minnesota 55104 • mitchellpiehl@gmail.com • (612) 999-5268 • mitchellpiehl.com

### Education

#### UNIVERSITY of Iowa

Ph.D. Computer Science, Sheets Fellowship Recipient

Advisor: Dr. Muchao Ye, Field of Research: Natural Language Processing (NLP), and Large Language Models

Iowa City, IA

Started August 2025

#### UNIVERSITY of St. Thomas

B.S. Computer Science, 3.98 GPA.

Minors: Data Science, Philosophy and Science, and Logic & Analytical Reasoning

- University of St. Thomas Division 1 Track and Field Captain and All-Conference Member

St. Paul, MN

Graduated May 2025

### Technical Skills

**Programming:** Python, Java, C++, SQL, MATLAB, HTML/CSS/Javascript

**Machine Learning/ Artificial Intelligence:** Natural Language Processing Techniques, Large Language Models

**Non-Technical:** Organization, Teaching, Tutoring, Leadership, Oral and Written Communication

### Experience

#### University of St. Thomas

##### Teaching Assistant and Research Assistant

- Led comprehensive research examining the philosophical evolution of Artificial Intelligence, analyzing key shifts from early symbolic AI to modern neural networks
- Designed and developed curriculum materials for a graduate-level "Foundations of AI" course
- Collaborated with faculty to integrate philosophical frameworks into technical AI coursework

St. Paul, Minnesota

August 2024 – May 2025

#### University of Colorado Colorado Springs

##### Natural Language Processing Researcher

- Researched novel techniques to improve Large Language Models' mathematical reasoning capabilities, resulting in state-of-the-art performance on math word problem solving tasks
- Achieved a 2% improvement over existing benchmarks across 4 distinct datasets
- Implemented new frameworks for the design and testing of LLM mathematical capabilities
- Conducted literature reviews then presented summary of findings to peers
- Submitted paper can be found here: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=5166090](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5166090)

Colorado Springs, CO

May 2024 – August 2024

#### University of St. Thomas

##### Computer Science Tutor

- Mentored and provided constructive feedback to dozens of students on a weekly basis on their coding projects and assignments, encouraging growth and skill development
- Delivered clear and concise explanations of complex computer science topics
- Taught fundamental Programming languages such as Java, Python, C++, and MATLAB, improving students' proficiency in both theory and practical applications

St. Paul, Minnesota

August 2023 – May 2024

### Leadership Activities

#### University of St. Thomas

##### NCAA Division 1 Athlete and Captain

- Led and motivated a 45-member Division 1 track team while maintaining a 3.98 GPA, demonstrating exceptional time management and organizational skills

St. Paul, Minnesota

August 2022 – May 2025

### Projects

#### Public Guide to Sustainable AI

- Researched and developed a modern and interactive website presenting a guide for the greater Midwest community on the environmental and social costs of AI, including steps to make it more sustainable