

Joel Markley

Computer Science & Engineering (CSE)
University of Minnesota - Twin Cities

markl087@umn.edu
<https://www.joelmarkley.com>

Employment

- 06/2025 – present **University of Minnesota - Twin Cities.** Minneapolis, MN
Pathways Scholar
Advisors: Harmanpreet Kaur, Stevie Chancellor
- Ideated and developed a research project aimed at designing a conversational moderation system that tailors its argumentation approach to the needs of the moderated user
 - Presented research at the Summer Undergraduate Research Expo (SURE) at the University of Minnesota
- 02/2024 – present **Buttercup Magazine, Dream Nails.** Minneapolis, MN
Contract Full Stack Developer
- Contracted by Buttercup Magazine to create their website for marketing, blogging, and issue distribution utilizing Figma, Next.js, Framer Motion, and Firebase
 - Contracted by Dream Nails to design and develop their marketing website utilizing Figma, Next.js, and GSAP
- 01/2025 – 05/2025 **University of Minnesota - Twin Cities.** Minneapolis, MN
Teaching Assistant for Formal Languages and Automata Theory (CSCI 4011)
Professor: Carl Sturtivant
- Assisted Professor Carl Sturtivant in his direction of CSCI 4011 through coursework evaluation and weekly office hours
- 08/2024 – 05/2025 **Bright Research.** Minneapolis, MN
Clinical Data Specialist Intern
- Perform study-specific database development through User Automated Testing (UAT)
 - Developed application to streamline subject registration, updates, and termination throughout a clinical study
 - Designed and developed Bright Research's SharePoint intranet page to support communication and cohesion within the company

Education

- 09/2025 – present **University of Minnesota - Twin Cities.** Minneapolis, MN
College of Science & Engineering
M.S. in Computer Science, anticipated to graduate 05/2026
Advisors: Harmanpreet Kaur, Stevie Chancellor
- 09/2022 – 08/2025 **University of Minnesota - Twin Cities.** Minneapolis, MN
College of Science & Engineering
B.S. in Computer Science, **GPA: 3.84 (*summa cum laude*)**

Research Experience

- 06/2025 – **University of Minnesota - Twin Cities**. Minneapolis, MN
08/2025 Pathways Research Program
Undergraduate Research Assistant
- 08/2024 – present **University of Minnesota - Twin Cities**. Minneapolis, MN
GroupLens Research Lab
Undergraduate Research Assistant, Full Stack Developer

Awards & Honors

- 2022-2025 CSE Dean's List
- 2025 1st Place in ACM UMN Hackathon

Publications

Ongoing Projects

- [o1] **Joel Markley**, Stevie Chancellor, Harmanpreet Kaur. Toward Personalized Conversational Moderation: The Design Methodology for an LLM-based Argumentative Dialogue System

Posters

- [p1] **Joel Markley**. Toward Personalized Conversational Moderation: The Design Methodology for an LLM-based Argumentative Dialogue System. (**Summer Undergraduate Research Symposium 2025**)

Relevant Coursework

- Spring 2025 Collaborative and Social Computing (CSCI 5125)
Professor: Harmanpreet Kaur
- Spring 2025 Visualization (CSCI 5609)
Professor: Qianwen Wang
- Fall 2024 Developing the Interactive Web (CSCI 5117)
Professor: Daniel Kluver
- Fall 2024 User Interface Design, Prototyping, and Evaluation (CSCI 5115)
Professor: Joseph Konstan

Relevant Affiliations

- 2022-2025 Social Coding Club
- 2022-2025 ACM UMN

Relevant Skills

Programming Languages C, C++, C#, Java, JavaScript, OCaml, Python, Swift, TypeScript

Development Technology Django, Figma, Firebase/Supabase, Flask, Git, Next.js, React.js, Svelte, Vue.js, .NET