

# Maria Milkowski

PhD Student

## Education

**PhD in Computer Science and Engineering** - University of Notre Dame, IN Aug 2024 – Present

- **Specialization:** Artificial Intelligence
- **Advisor:** Tim Weninger

**BS in Computer Science** - Seattle University, WA Sept 2020 – June 2024

- **Relevant Coursework:** Machine Learning, Artificial Intelligence, Object Oriented Design, Refactoring and System Maintenance, Game Design

## Research Experience

**Graduate Research Assistant** | Weninger Lab - University of Notre Dame Jan 2025 – Present

- Conducted a user study investigating framing and priming theory to determine if they influence subsequent search terms and user behavior, with and emphasis on potential political influences

**Graduate Research Assistant** | EPOCH Lab - University of Notre Dame Aug 2024 – Jan 2025

- In collaboration with the St. Joseph County Department of Health and Lucy Family Institute, studied youth vaping habits to find effective technological prevention and cessation methods

**Undergraduate Research Assistant** | Seattle University June 2023 – June 2024

- Implemented and investigated Utilitarian ethical model into societal simulation *Sugarscape*
- Created a new wholistic measure of societal success and used it to determine the benefit of economic and ethical models

## Publications

**A Little Bit Goes a Long Way: Modeling Universal Basic Income for Noncooperative Artificial Agents**, IEEE Ethics '25  
*Milkowski, M.*, Gupta, A., Kremer-Herman, N. June 2025

**Youth Vaping in the Digital Age: A Systematic Review of Technological Interventions for Prevention and Cessation**, ACM GROUP '25  
*Milkowski, M.*, Olesk, J., Martel Asfura, D., Barco, C., Cervera, C., Wachira, M., Sisk, M., Balke, A., Purushotham, D., Williams, R, Badillo-Urquiola, K. Jan 2025

**Leveraging Ethics for Autonomous Agent Decision-Making**, Seattle U CS Seminar Series 2023  
Kremer-Herman, N., *Milkowski, M.* Oct 2023

## Projects

**Tech Ethics Consultant** | Seattle U School of Law July 2024

- Lectured law students on relevant computer science topics, provided feedback on student projects
- Advised course creators on creating a tech ethics course for law and graduate computer science students

**Admitted Student Mentor** | Seattle University June 2024

**Pro Bono Project Manager** | iMorgan Medical December 2023

- Managed medical image tagging project that within its first iteration had over 90% accuracy.
- Automates the process of tagging medical images and sorting the tags into more general classifications using C# and tesseract OCR

**Membership + Mentorship Chair** | Society of Women in Engineering - Seattle U Chapter June 2022 - June 2023

## Industry Experience

---

### Project Manager | F5

June 2024 – Aug 2024

- Coordinated with directors, program managers, and others as needed to organize a technology migration of acquired companies to the F5 system

### Software Engineer - Capstone | F5

Sept 2023 – June 2024

- Acted as project manager to create an AI to guide members toward self-help materials, resulting in less maintenance cards being submitted

### Data Collection Associate | Q-Analysts

June 2022 – Sept 2023

- Guide research participants for data collection sessions in a secured office to perform captures, prep and maintain equipment, and ensure security of devices. Collected and stored confidential client and participant information
- Filter data and run quality assurance tests on multiple AR and VR devices and their collected data

## Teaching Experience

---

### Teaching Assistant | University of Notre Dame

August 2024 – Present

- Spring 2025 - Human-Computer Interaction - Annalisa Szymanski
- Fall 2024 - Database Systems Concepts - Tim Weninger

## Skills

---

**Languages:** C++, C#, Python, SQL, HTML/CSS, F, Assembly, Java, C

**Research Methods:** Interviewing, Thematic Analysis