

# Tess Eschebach

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## Education

### University of Chicago

*PhD Student, Computer Science*

**Chicago, IL**

*September 2023 - Present*

### University of Michigan - Ann Arbor

*Bachelor of Science in Engineering in Data Science Summa Cum Laude  
College of Engineering*

**Ann Arbor, MI**

*2023*

*Bachelor of Science in Film, Television, and Media with Distinction  
College of Literature, Science, and Arts*

*2023*

**Coursework:** Machine Learning, New Media Theory, Artificial Intelligence, Web Systems, Circuits, Online Communities, Digital Bodies, 360 Video, Virtual Reality, Cyber Security

## Research Experience

### University of Michigan - Ann Arbor

#### ***Computational HCI Lab***

*Research Assistant (November 2021 - September 2023)*

- Leading a human subject study surrounding the monetization strategies of educational YouTubers and influences of their algorithmic perceptions on choice of platform
- Crafting a semi-structured interview guide based on in-depth literature review
- Working with an interdisciplinary team to integrate the fields of sociology, art, and human-computer interaction into everyday resistance techniques in online spaces

#### ***Digital Water Lab***

*Research Assistant (May 2021 - May 2022)*

- Building water level sensors utilizing PCBs, depth sensors, and custom casing
- Deploying sensors in the field by surveying sites and installing sensors near rivers
- Creating graphical representations of water level sensor data on Grafana and integrating water data from numerous sites into a public map using .geojsons hosted on AWS
- Leading the early stages of collecting GPS elevation data to create more accurate graphs
- Working with Oakland County, Michigan to create custom water level dashboards to help remotely monitor high risk locations to prevent flooding and maintain legal levels

#### ***University of Michigan Libraries***

*Student Library Intern (July 2020 - March 2021)*

- Animating videos with Adobe Animate geared towards helping multilingual students engage with library resources, focusing on the multitude of ways to get a book
- Working with language specialists and library staff to translate the video into multiple languages and to develop a understandable visual language for the underlying video
- Writing blog posts about underutilized resources after researching student library use

## Presentations

**Eschebach, T.**, Schmidt, J., Kerkez, B. Preventing Flooding Through Data Visualization.  
Presented at: Data for Public Good Symposium 6; March 2022; Ann Arbor, MI.

## Exhibition History

**Eschebach, T.** Consume. Exhibited at: Digital Studies Institute “Amplify: DSI Student Showcase”; April 2023; Ann Arbor, MI

**Eschebach, T.** Making Memories. Exhibited at: Digital Studies Institute “Amplify: DSI Student Showcase”; April 2022; Ann Arbor, MI

## Teaching Experience

**University of Chicago** **Chicago, IL**  
*Intro to Computer Science - CMSC 14100* Instructional Assistant (January 2024 - March 2024)

**University of Michigan - Ann Arbor, College of Engineering** **Ann Arbor, MI**  
*Intro to Computer Security - EECS 388* Instructional Assistant (December 2022 - April 2023)  
Instructional Assistant - Project Development (June 2023 - July 2023)

- Teaching a lecture style discussion section reinforcing topics and presenting new material
- Holding office hours to answer student questions on course projects and cyber security
- Setting rubric for a subsection of exam questions and grading exams with a team of IAs
- Increasing accessibility by clarifying project descriptions and shorting project start up
- Aiding the development of course materials integrating Autopsy, Tor, and HTML sites

**University of Michigan - Ann Arbor, School of Information** **Ann Arbor, MI**  
*Online Communities - SI 429* Instructional Assistant (August 2022 - December 2022)

- Assisting with activities during class periods and answering student questions
- Grading weekly reading responses and providing feedback on large class assignments
- Setting up Canvas page for the full term including graded assignments and readings
- Creating and moderating Discord community for the class to promote online engagement

## Leadership Experience

**The University of Chicago** **Chicago, IL**  
*Library Student Advisory Council* Physical Science Rep (January 2024 - Present)

**Inter-Cooperative Council** **Ann Arbor, MI**  
*Mich-Minnies* Treasurer (May 2022 - August 2023)

- Managing over \$6000 a month to provide food and utilities for 40 plus house residents
- Working with the larger non-profit organization to maintain receipts and reimbursements
- Running budget meetings of 30 plus individuals to vote on specific allocation of funds

**Mich-Minnies** *Work Manager* (January 2022-May 2022)

- Allocating four hours of chores per week for 40 plus residents of a coop
- Enforcing completion of work and aiding those who needed assistance

**University of Michigan - Ann Arbor**  
**Sierra Club**

**Ann Arbor, MI**

*Vice President (May 2021 - January 2022)*

*Officer (September 2020 - May 2021, January 2022 - May 2022)*

- Establishing club on campus and helping with formatting structures of meetings
- Facilitating workshops about sustainability and supporting park and game day cleanups
- Representing the University of Michigan chapter of Sierra Club at monthly meetings with Huron Valley Sierra Club and engagement with state-level Sierra Club representatives

## **Awards**

***The Daniels Fellowship.*** The University of Chicago. 2023.

***Excellence in Sustainability Honors Cord Program.*** The University of Michigan. 2022-2023.

***Golden Wallet.*** Winter Annual Meeting. Inter Cooperative Council Ann Arbor. 2023.

***Best in Show.*** Amplify. Digital Studies Institute at The University of Michigan. 2023.

***Honorable Mention.*** Amplify. Digital Studies Institute at The University of Michigan. 2022.

***University Honors.*** The University of Michigan.

Dec. 2018, April 2020, Dec. 2020, Dec. 2021, April 2022, Dec. 2022.

***Dean's List.*** The University of Michigan.

Dec. 2018, Dec. 2019, Dec. 2021, April 2022, Dec. 2022.

***James B. Angell Scholar.*** The University of Michigan. March 2022.

***William J. Brainstorm Freshman Prize.*** The University of Michigan. 2019.

## **Skills**

***Programming:*** C++, Python (PyTorch, Pandas, and Hugging Face transformers for LLMs and machine learning in depth), HTML, JavaScript, AWS, MATLAB, SQL, LaTeX, Git, and R

***Qualitative Analysis Software:*** Nvivo and MaxQDA

***Qualitative Analysis Skills:*** open coding, grounded theory,

***Hardware:*** PCB design (Eagle, Verilog, and LTspice), Arduino, soldering

***Creative Software:*** Adobe Suite, Audacity, Unity and Unreal Engine [for VR]

***Creative Skills:*** Cinematography, audio recording, screenwriting, 360 video,