

# Mo Houtti

MIXED METHODS RESEARCHER · HUMAN-COMPUTER INTERACTION

Minneapolis, MN

☎ (802) 458-7400 | ✉ mohamed.houtti@gmail.com | 🏠 mo.houtti.com | 📺 mhoutti | 🎓 Mo Houtti

## Summary

Computer Science PhD candidate at University of Minnesota specializing in human-computer interaction (HCI) and social computing. I'm a jack-of-all-trades researcher who **excels with a variety of methods, both qualitative and quantitative**. I'm an "intrapreneur" by nature; I'm always thinking about how the systems supporting my work could be better, and **I proactively put my new ideas into action**.

## Work Experience

### GroupLens Research, University of Minnesota - Twin Cities

Minneapolis, MN

GRADUATE RESEARCHER

May 2020 - present

- **Co-authored peer-reviewed publications** at top HCI venues (see Publications section).
- Led multiple research projects: collaboratively **developed new research ideas, ran weekly research meetings, set and scheduled deliverables, solicited and implemented feedback from senior collaborators, mentored junior collaborators**, and otherwise handled many of the logistics involved in producing high-quality HCI research.
- Formulated and investigated novel research questions using a **varied mixed methods toolbox including user interviews, experiments, system development (including user-centered design and prototyping), qualitative inductive thematic analysis, and exploratory quantitative and statistical analysis**.

### Wikimedia Foundation

San Francisco, CA

RESEARCH INTERN

May 2022 - August 2022

- **Designed, implemented, and deployed an online recommender system-based experiment** to hundreds of active Wikipedia editors over 3 months.
- **Presented research plan and experimental design proposal** to the Wikimedia Foundation's Research Team.
- **Drafted detailed study documentation** for IRB approval and review/iteration with collaborators.
- Wrote original code to **implement experiment on an existing open-source recommender system**.
- Conducted all **statistical modeling and analysis**.

### Harvard Business School Online

Boston, MA

DATA SCIENCE INTERN

May 2021 - August 2021

- Independently **conducted exploratory research** to identify behavioral predictors of student success in online business school courses.
- **Created foundational data products** to facilitate future research by various stakeholder groups.
- **Communicated key findings** to diverse teams with varying levels of technical knowledge.

### Knights Lab, University of Minnesota - Twin Cities

Minneapolis, MN

GRADUATE RESEARCHER

May 2019 - May 2020

- **Co-authored peer-reviewed publications** in top-tier venues at the intersections of computation and medicine, microbiology, biophysics, and nutritional science (see Publications section).
- **Leveraged high-powered super-computing resources** to process and analyze large metagenomic datasets.

### Union Street Media

Burlington, VT

WEB DEVELOPER

June 2016 - May 2019

- **Proposed, led, and piloted company's adoption of A/B testing** to improve conversion rates.
- Evaluated platform features and worked with engineering team to **propose, test, and implement improvements**.
- Collaborated with support team to **preempt common issues, reduce issue resolution times, and train new staff**.
- Worked closely with project coordinators to **iterate on client feedback and ensure timely product deliveries**.

## Education

### University of Minnesota - Twin Cities

Minneapolis, MN

PH.D. IN COMPUTER SCIENCE

2024 (expected)

### University of Minnesota - Twin Cities

Minneapolis, MN

M.S. IN COMPUTER SCIENCE

2022

- GPA: 4.0

### Middlebury College

Middlebury, VT

B.A. IN COMPUTER SCIENCE AND PHILOSOPHY

2016

- GPA: 3.63
- Graduated *Magna Cum Laude*, with Computer Science departmental honors

## Peer-Reviewed Publications

---

- **M. Houtti**, I. Johnson, L. Terveen. 2024. Leveraging Recommender Systems to Reduce Content Gaps on Peer Production Platforms. *International AAAI Conference on Web and Social Media (ICWSM)*. <https://doi.org/10.48550/arXiv.2307.08669>.
- **M. Houtti**, M. Zhou, L. Terveen, S. Chancellor. 2023. “All of the White People Went First”: How Video Conferencing Consolidates Control and Exacerbates Workplace Bias. *Proceedings of the ACM on Human-Computer Interaction (CSCW)*. <https://doi.org/10.1145/3579597>.
- **M. Houtti**, I. Johnson, J. Cepeda, S. Khandelwal, A. Bhatnagar, L. Terveen. 2022. “We Need a Woman in Music”: Exploring Wikipedia’s Values on Article Priority. *Proceedings of the ACM on Human-Computer Interaction (CSCW)*. <https://doi.org/10.1145/3555156>.
- C. Zhang\*, **M. Houtti\***, C.E. Smith, R. Kong, L. Terveen. 2022. Working for the Invisible Machines or Pumping Information into an Empty Void? An Exploration of Wikidata Contributors’ Motivations. *Proceedings of the ACM on Human-Computer Interaction (CSCW)*. <https://doi.org/10.1145/3512982>. (**\*co-first authors**)
- K.J. Tompkins, **M. Houtti**, ..., W.R. Gordon. 2021. Molecular underpinnings of ssDNA specificity by Rep HUH-endonucleases and implications for HUH-tag multiplexing and engineering. *Nucleic Acids Research*. <https://doi.org/10.1093/nar/gkaa1248>.
- R.A.T. Mars, Y. Yang, T. Ward, **M. Houtti**, ..., P.C. Kashyap. 2020. Longitudinal Multi-omics Reveals Subset-Specific Mechanisms Underlying Irritable Bowel Syndrome. *Cell*. <https://doi.org/10.1016/j.cell.2020.08.007>.

## Honors & Awards

---

2023	<b>Best Paper Honorable Mention for “All of the White People Went First”</b> , CSCW 2023	<i>Minneapolis, MN</i>
2023	<b>Impact Recognition for “All of the White People Went First”</b> , CSCW 2023	<i>Minneapolis, MN</i>
2021	<b>Cisco Research Fellow</b> , University of Minnesota - Twin Cities	<i>Minneapolis, MN</i>
2019	<b>GAGE Fellow</b> , University of Minnesota - Twin Cities	<i>Minneapolis, MN</i>

## Service

---

### University of Minnesota CSGSA

*Minneapolis, MN*

#### SLACK COORDINATOR

2019 - 2021

- Created and **managed the official Slack channel** for UMN Computer Science graduate students.
- Coordinated with the Computer Science department to **help onboard new students**.
- Designed and led online activities to **build social cohesion during the COVID-19 pandemic**.

### University of Minnesota CSGSA

*Minneapolis, MN*

#### RESEARCH AND DISCUSSION SEMINARS COORDINATOR

2020 - 2021

- **Scheduled and coordinated** bi-weekly research talks.
- **Piloted a new initiative** to encourage cross-lab research collaboration.