Hayoung Jung

CONTACT Information Email: hjung10@cs.washington.edu

www.hayoungjung.me

Research Interests My research focuses on advancing inclusive AI technologies and online platforms to better serve people who are overlooked in the development of these systems. Driven by my interdisciplinary background, I develop technical frameworks and methods grounded in social science to (1) audit AI technologies and platforms for bias and misinformation, and (2) understand social phenomena, such as community norms, through language and online behavior, to promote socially-attuned and equitable technologies.

Topics: Social Computing, Computational Social Science, Algorithmic Audits, and NLP.

Education

Princeton University, Princeton, New Jersey

2025 - Present

Ph.D. in Computer Science

Advisers : Manoel Horta Ribeiro, Aleksandra Korolova

University of Washington, Seattle, Washington

2023 - 2025

M.S. in Computer Science

Thesis: Towards Inclusive Technologies: Examining Social Values and Harms in Large-Scale

Sociotechnical Systems (<u>UW CSE Best Master's Thesis Award</u>)

Adviser: Tanushree Mitra, GPA: 4.0/4.0

University of Washington, Seattle, Washington

2019 - 2023

B.S. with Distinction in Computer Science, B.A. in Political Science

Departmental Honors; $magna\ cum\ laude$ Adviser: Tanushree Mitra, GPA: 3.94/4.0

Publications

* denotes equal contributions

In Preparation

- [1] Navreet Kaur, **Hayoung Jung**, Shravika Mittal, Munmun De Choudhury, and Tanushree Mitra. Persona-based Evaluation of Generative Search for Opioid-use Information. *In preparation*.
- [2] Mahika Phutane*, **Hayoung Jung***, Tanushree Mitra, and Aditya Vashistha. Covert Ableism in AI: Analysis of LLM-Generated Hiring Conversations. *In preparation*.

Preprints

[3] **Hayoung Jung**, Shravika Mittal, Ananya Aatreya, Navreet Kaur, Munmun De Choudhury, and Tanushree Mitra. MYTHTRIAGE: Scalable Detection of Opioid Use Disorder Myths on a Video-Sharing Platform. *Under submission at the ACL Rolling Review*.

Peer-Reviewed Conferences

- [4] Hayoung Jung, Prerna Juneja, and Tanushree Mitra. Algorithmic Behaviors Across Regions: A Geolocation Audit of YouTube Search for COVID-19 Misinformation Between the United States and South Africa. In *Proceedings of ICWSM 2025*.
- [5] Shravika Mittal, Hayoung Jung, Mai ElSherief, Tanushree Mitra, and Munmun De Choudhury. Online Myths on Opioid Use Disorder: A Comparison of Reddit and Large Language Model. In Proceedings of ICWSM 2025.
- [6] Chan Young Park*, Shuyue Stella Li*, Hayoung Jung*, Svitlana Volkova, Tanushree Mitra, David Jurgens, and Yulia Tsvetkov. VALUESCOPE: Unveiling Implicit Norms and Values via Return Potential Model of Social Interactions. In Proceedings of Findings of EMNLP 2024.
- [7] Preetam Prabhu Srikar Dammu*, **Hayoung Jung***, Anjali Singh, Monojit Choudhury, and Tanushree Mitra. "They are uncultured": Unveiling Covert Harms and Social Threats in LLM Generated Conversations. In *Proceedings of EMNLP 2024*. Nominated for Best Paper Award.
 - Featured in UW News : "In the 'Wild West' of AI chatbots, subtle biases related to race and caste often go unchecked"

Research Experiences	Humans and Machines Lab, Princeton Department of Computer Science Graduate Research Assistant, advised by Manoel Horta Ribeiro & Aleksandra Korolova	2025 - Present
	Social Computing & Algorithmic Experiences Lab, UW Information School Graduate Research Assistant, advised by Tanushree Mitra	2023 - 2025
	TsvetShop , UW Computer Science & Engineering Graduate Research Assistant, advised by Yulia Tsvetkov.	2023 - 2024
	Social Computing & Algorithmic Experiences Lab, UW Information School Undergraduate Research Assistant, advised by Tanushree Mitra. <u>DUB REU Fellow</u> (Summer '21, '22)	2021 - 2023
Awards & Honors	Best Master's Thesis Award, UW Computer Science & Engineering Awards a student who writes the most outstanding master's thesis of the year.	2025
	First-Year Fellowship in the Natural Sciences and Engineering, Princeton Universal Awards one-year fellowship to first-year doctoral students in Engineering.	sity 2025
	NSF Graduate Research Fellowship Honorable Mention, National Science Foundate Recognizes "individuals who have demonstrated their potential for significant research achievements in STEM or STEM education."	ion 2025
	Graduate Student Conference Presentation Award, UW Graduate School Awards \$300 to support registration fees for a conference presentation.	2024
	Undergraduate Service Award, UW Computer Science & Engineering Awards 5 UW CSE undergraduates, out of 2,000 students, for their outstanding service to the department.	2023
	Population Health Recognition Award, UW Undergraduate Research Program Recognizes undergraduate researchers presenting at the UW Research Symposium for their "innovative and well-presented population health research work."	2023
	Phi Beta Kappa, Washington Alpha Chapter Honors top-ranking students based on cumulative academic achievement.	2022
	Husky 100 Award, University of Washington Awards 100 out of 55,000 students for significant contributions to the university.	2022
	Mary Gates Research Scholarship, University of Washington A competitive \$5,000 research scholarship for undergraduates at the UW.	2022
	Washington State Opportunity Scholarship, State of Washington Awards undergraduate students from low- and middle-income families in Washington State to support their higher education pursuits.	2021
	Roy F. Mather Scholarship, Community Foundation for Southwest Washington Awards \$2,500 to an outstanding engineering student from Southwest Washington.	2020
TEACHING EXPERIENCE	Guest Lectures	
	INFO498: Algorithms and Society, UW Information School Title: My Journey Through Undergrad Research & How To Get Involved.	Spring 2024
	Teaching Assistantships CSE444: Database Systems Internals, UW CSE Graduate Teaching Assistant, Instructor: Ryan Maas.	Winter 2025
	CSE414: Intro to Database Systems, UW CSE Graduate Teaching Assistant, Instructor: Ryan Maas	023, Winter 2024
	CSE190B : CSE Direct Admit Seminar, UW CSE Undergraduate Teaching Assistant, Instructor : Dan Grossman	Autumn 2022
	CSE142: Intro to Programming I, UW CSE Undergraduate Teaching Assistant, Instructor: Brett Wortzman.	Autumn 2021
Industry Experience	Qualtrics, AI/ML Data Intelligence Center of Excellence (DICE) Applied Scientist Intern	Summer 2025
	F5 Networks, Rapid Development Team Software Engineer Intern	Summer 2024

Leadership

UW Association for Computing Machinery (UW ACM)

2019-2023

Student Adviser, Vice Chair, Treasurer, Associate Officer

- Led the largest student-run group at UW CSE, organizing social & career events for students.
- Spearheaded the Research Night Series, with 110 undergraduates attending to learn more about getting involved in computing research and engage with 9 attending labs at UW.
- Expanded the Big/Little Peer Mentorship Program to support 350 new students at UW CSE.
- Led quarterly fundraising for Code.org and Black Girls CODE, raising \$7,460 in donations total.

Polling and Open Data Initiative at the University of Washington

2020-2021

Co-Founder & Technology Director, advised by Profs. Christopher S. Parker & Geoffrey P.R. Wallace

- Founded a 25-student organization that gathers, analyzes, and presents data to advance public understanding of our communities and shape their policies.
- **Key Outcome**: Analyzed 3.8K student responses from UW's campus survey, providing policy recommendations to the UW Board of Regents [PDF] on post-pandemic education practices.
- Other Organizations Served: Paul G. Allen School of Computer Science & Engineering [PDF], Associated Students of the University of Washington [PDF] and Washington State Parks.

Associated Students of the University of Washington (ASUW)

2019-2020

Student Senator & Member of the Student Technology Fee (STF)

- Lobbied state legislators at the Washington State Capitol on higher education issues.
- Oversaw the funding of 13 technology project proposals through STF's \$10 million budget.

MENTORSHIP

Ananya Aatreya, UW CSE Undergraduate

2024-2025

Co-authored [3]. Worked on the MYTHTRIAGE project.

Service & Volunteer

Reviewing

- ICWSM: 2026
- EMNLP Workshop on Customizable NLP : 2024
- ACL Student Research Workshop: 2025

Department Committees

- UW CSE Student Engagement and Access Committee : 2021-2023
- UW CSE Teaching-Track Faculty Recruiting Committee: 2022-2023

Volunteer

- Volunteer & Room Monitor, EMNLP Workshop on Customizable NLP : 2024
- Speaker & Organizer, UW ACM Research Night Series : 2021-2022
- Organizer, UW ACM Big/Little Peer Mentorship Program: 2021-2022
- Organizer, UW ACM First/Second-Year Internship Prep Panel: 2020-2021
- Organizer, UW CSE Quarterly Departmental Socials: 2019-2023
- Panelist, Admitted Student Day Undergraduate Research Roundtable : 2022
- Panelist, CSE Direct Admit Seminar (Undergrad Research Panel): 2020, 2022
- Panelist, Allen School Spring Research Showcase: 2021

Presentations

Auditing YouTube Search for COVID-19 Misinformation Between the U.S. and South Africa. ICWSM 2025 (Oral) and Workshop on Misinformation Detection, Copenhagen, Denmark June 2025

"They are uncultured" : Unveiling Covert Harms & Social Threats in Generated Conversations. $EMNLP\ 2024\ (Oral),\ Miami\ FL,\ USA$ November 2024

VALUESCOPE: Unveiling Implicit Norms and Values via Return Potential Model.

EMNLP 2024 (Poster), Miami FL, USA

November 2024

Geolocation Audit of YouTube for COVID-19 Misinformation

Skills

- $\hbox{\bf \cdot Computer-related:} \ Python, SQL, Java, C/C++, R, Pandas, LangChain/LangGraph, PyTorch, Flask, Numpy, Git, Matplotlib, AWS, Azure, Javascript, NGINX, HTML/CSS \\$
- Natural Languages : English (native); Korean (fluent)