Hayoung Jung

CONTACT
INFORMATION

Email : hayoung@cs.princeton.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* (UW CSE Best Master's Thesis Award)
    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

<u>In Preparation</u>

[7] Navreet Kaur, **Hayoung Jung**, Hoda Ayad, Shravika Mittal, Munmun De Choudhury, and Tanushree Mitra. Same Question, Different Voices : Simulating Role-Based Questions for Contextualized Evaluations. *In preparation.*

[6] Mahika Phutane*, **Hayoung Jung***, Matthew Kim, Tanushree Mitra, and Aditya Vashistha. Covert Ableism in AI : Analysis of LLM-Generated Hiring Conversations. *In preparation.*

<u>Peer-Reviewed Conferences</u>

[5] **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. In *Proceedings of EMNLP 2025.*

[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.*

[3] 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.*

[2] 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.*

[1] Preetam 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.* <u>Nominated for Best Paper Award.</u>

- 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	2025 - Present
	Graduate Research Assistant, advised by Manoel Horta Ribeiro & Aleksandra Korolova	
	Social Computing & Algorithmic Experiences Lab, UW Information School	2023 - 2025
	Graduate Research Assistant, advised by Tanushree Mitra	
	TsvetShop, UW Computer Science & Engineering	2023 - 2024
	Graduate Research Assistant, advised by Yulia Tsvetkov.	
	Social Computing & Algorithmic Experiences Lab, UW Information School	2021 - 2023
	Undergraduate Research Assistant, advised by Tanushree Mitra.	
	<u>DUB REU Fellow</u> (Summer '21, '22)	

AWARDS & HONORS	**Best Master's Thesis Award,** UW Computer Science & Engineering	2025
	Awards a student who writes the most outstanding master's thesis of the year.	
	First-Year Fellowship in the Natural Sciences and Engineering, Princeton University	2025
	Awards one-year fellowship to first-year doctoral students in Engineering.	
	NSF Graduate Research Fellowship Honorable Mention, National Science Foundation	2025
	Recognizes "individuals who have demonstrated their potential for significant research achievements in STEM or STEM education."	
	Graduate Student Conference Presentation Award, UW Graduate School	2024
	Awards $300 to support registration fees for a conference presentation.	
	Undergraduate Service Award, UW Computer Science & Engineering	2023
	Awards 5 UW CSE undergraduates, out of 2,000 students, for their outstanding service to the department.	
	Population Health Recognition Award, UW Undergraduate Research Program	2023
	Recognizes undergraduate researchers presenting at the UW Research Symposium for their "innovative and well-presented population health research work."	
	Phi Beta Kappa, Washington Alpha Chapter	2022
	Honors top-ranking students based on cumulative academic achievement.	
	Husky 100 Award, University of Washington	2022
	Awards 100 out of 55,000 students for significant contributions to the university.	
	Mary Gates Research Scholarship, University of Washington	2022
	A competitive $5,000 research scholarship for undergraduates at the UW.	
	Washington State Opportunity Scholarship, State of Washington	2021
	Awards undergraduate students from low- and middle-income families in Washington State to support their higher education pursuits.	
	Roy F. Mather Scholarship, Community Foundation for Southwest Washington	2020
	Awards $2,500 to an outstanding engineering student from Southwest Washington.	

TEACHING EXPERIENCE	<u>Guest Lectures</u>	
	INFO498 : Algorithms and Society, UW Information School	Spring 2024
	Title : *My Journey Through Undergrad Research & How To Get Involved.*	
	<u>Teaching Assistantships</u>	
	CSE444 : Database Systems Internals, UW CSE	Winter 2025
	Graduate Teaching Assistant, Instructor : Ryan Maas.	
	CSE414 : Intro to Database Systems, UW CSE	Autumn 2023, Winter 2024
	Graduate Teaching Assistant, Instructor : Ryan Maas	
	CSE190B : CSE Direct Admit Seminar, UW CSE	Autumn 2022
	Undergraduate Teaching Assistant, Instructor : Dan Grossman	
	CSE142 : Intro to Programming I, UW CSE	Autumn 2021
	Undergraduate Teaching Assistant, Instructor : Brett Wortzman.	

INDUSTRY EXPERIENCE	**Qualtrics**, AI/ML Data Intelligence Center of Excellence (DICE)	Summer 2025
	Applied Scientist Intern	
	F5 Networks, Rapid Development Team	Summer 2024
	Software Engineer Intern	

F5 Networks, Distributed Cloud Edge Services Team   Summer 2023
Software Engineer Intern

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 [5]. Worked on the MYTHTRIAGE project.

SERVICE &   **Reviewing**
VOLUNTEER
- 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, UW DUB REU Research Panel : 2024
- 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

Skills

- **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)