Hayoung Jung

CONTACT INFORMATION

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`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>

[8] **Hayoung Jung**, Aleksandra Korolova*, Manoel Horta Ribeiro*. Can AI Deliver Accurate Scientific Conclusions ? A Large-Scale Health Benchmark from Systematic Reviews. *In Preparation.*

<u>Preprints</u>

[7] Navreet Kaur, **Hayoung Jung***, Hoda Ayad*, Shravika Mittal, Munmun De Choudhury, and Tanushree Mitra. Who's Asking ? Simulating Role-Based Questions for Conversational AI Evaluation. *In submission.*

[6] Mahika Phutane*, **Hayoung Jung***, Matthew Kim, Tanushree Mitra, and Aditya Vashistha. ABLEIST: Intersectional Disability Bias in LLM-Generated Hiring Scenarios. *In submission.*

<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*. Nominated for Best Paper Award.

- Media Coverage : "OpenAI is huge in India. Its models are steeped in caste bias." (MIT Technology Review, 2025), "In the 'Wild West' of AI chatbots, subtle biases related to race and caste often go unchecked" (University of Washington News, 2024)

RESEARCH EXPERIENCES		
Center for Information Technology Policy (CITP), Princeton Computer Science *Graduate Researcher*, 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. DUB REU Fellow (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
Princeton SEAS Travel Grant, Princeton University *Awards $400 to support registration fees for conference presentation.*		2025
First-Year Fellowship in the Natural Sciences and Engineering, Princeton University *Awards one-year fellowship to first-year doctoral students in Engineering.*		2025
NSF Graduate Research Fellowship Honorable Mention, National Science Foundation *Recognizes "individuals who have demonstrated their potential for significant research achievements in STEM or STEM education."*		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 undergraduate 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		Autumn 2023, Winter 2024
CSE190B : CSE Direct Admit Seminar, UW CSE *Undergraduate Teaching Assistant*, Instructor : Dan Grossman		Autumn 2022

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 & VOLUNTEER

Reviewing
- ICWSM : 2026
- CHI : 2026
- IASEAI : 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

MythTriage : Scalable Detection of Opioid Use Disorder Myths on a Video-Sharing Platform.
EMNLP 2025 (Poster), Suzhou, China   (Forthcoming) November 2025

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
UW Undergraduate Research Symposium, Seattle WA, USA.   May 2023

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)