

RESEARCH INTERESTS

Human-AI Interaction, Computational Social Science, AI Agent Simulation, Intergroup Conflict, Data Journalism

EDUCATION

Seoul National University M.A. in Communication (hci+d Lab, Advisors: Joonhwan Lee, Hajin Lim)	2023 - 2025 Seoul, South Korea
Seoul National University (Summa Cum Laude) B.A. in Communication B.A. in Information Science & Cultures	2018 - 2023 Seoul, South Korea

PUBLICATIONS

Peer-reviewed Conference Papers

- [C3] **Adaptive-VP: A Framework for LLM-Based Virtual Patients that Adapts to Trainees' Dialogue to Facilitate Nurse Communication Training**
Keyeun Lee, Seolhee Lee, Esther Hehsun Kim, Yena Ko, Jinsu Eun, Dahee Kim, Hyewon Cho, Haiyi Zhu, Robert E. Kraut, Eunyoung E. Suh, Eun-mee Kim, and Hajin Lim. 2025. In Findings of the Association for Computational Linguistics: ACL 2025, pages 2319–2352.
Links: [Paper](#), [Github](#)

- [C2] **SPeCtrum: A Grounded Framework for Multidimensional Identity Representation in LLM-Based Agent**
Keyeun Lee, Seo Hyeong Kim, Seolhee Lee, Jinsu Eun, Yena Ko, Hayeon Jeon, Esther Hehsun Kim, Seonghye Cho, Soeun Yang, Eun-mee Kim, and Hajin Lim. 2025. Proceedings of the 2025 Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics: Human Language Technologies (Volume 1: Long Papers), pages 6971–6991.
Links: [Paper](#), [Github](#)

- [C1] **Letters from Future Self: Augmenting the Letter-Exchange Exercise with LLM-based Agents to Enhance Young Adults' Career Exploration**
Hayeon Jeon, Suhwoo Yoon, Keyeun Lee, Seo Hyeong Kim, Esther Hehsun Kim, Seonghye Cho, Yena Ko, Soeun Yang, Laura Dabbish, John Zimmerman, Eun-mee Kim, and Hajin Lim. 2025. In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25). Article 100, 1–21. (Best Paper Award - Top 1% of submissions)
Link: [Paper](#)

Peer-reviewed Journal Papers

- [J2] **Ideology and Policy Preferences in Synthetic Data: The Potential of LLMs for Public Opinion Analysis**
Keyeun Lee, Jaehyuk Park, Suh-hee Choi, and Changkeun Lee. 2025. Media and Communication, 13:9677.
Link: [Paper](#)

- [J1] **Analysis of Offensive Language Use by South Korea's Two Major Political Parties: Using Party Press Releases from 2007 to 2023**
Jong Hee Park*, Keyeun Lee*. 2024. Korean Political Science Review. 58(2). 73-104
Link: [Paper](#)

Conference Presentation

- [P1] **Breaking or Building Bridges? Echo Chambers on YouTube through Cross-Comments**
Sang Jung Kim, **Keyeun Lee**, Jason Greenfield. 2025. Paper accepted for the American Political Science Association Annual Meeting (APSA).

Thesis

- [T1] **Do LLM Agents Conform and Hedge Like Humans?: The Role of Persona Backstories in Agent Debates across Power, Sex, and Culture**
Keyeun Lee (Committee: Joonhwan Lee, Eun-mee Kim, Bongwon Suh)

Under Review

- [U3] **Asymmetric Dynamics of Partisan Warriors in YouTube Comments**
Keyeun Lee, Sang Jung Kim.
- [U2] **DeepBrief: Supporting Reflective Learning through AI-Guided Debriefing in Virtual Patient Simulations**
Keyeun Lee, Hyewon Cho, Jinsu Eun, Minhwa Koo, Esther Hehsun Kim, Dahee Kim, Miyoung Yoo, Eunyong Suh, Eun-mee Kim, Hajin Lim.
- [U1] **DeepAware: Using Experiential Deepfake Simulations to Enhance Cybersecurity Awareness in Older Adults**
Hana Oh, Eunbi Lee, Seungju Shin, **Keyeun Lee**, Miran Pyun, Hajin Lim.

RESEARCH EXPERIENCE

HCI Researcher

Artificial Intelligence Institute, SNU

- Designed and developed a Korean AI agent framework to simulate political polarization dynamics in South Korea

09/2025 – Present

Graduate Student Researcher

hci+d lab, SNU (Advised by *Prof. Joonhwan Lee* and *Prof. Hajin Lim*)

- Developed a grounded framework enabling scalable implementation of realistic individual personas in LLMs (**SNU X CMU HCAI Research Project**)
- Designed and developed a Communication Training System for nurses featuring LLM-driven Virtual Patient interactions (**SNU X CMU HCAI Research Project**)

2023 – 2025

Undergraduate Research Intern

Climate Lab, SNU (Advised by *Prof. Sujong Jeong*)

- Analyzed data visualization and interactive storytelling methods for climate change communication

07/2021 – 06/2022

Global Leaders Program Participant

Dept of Political Science and International Relations, SNU (Advised by *Prof. Jong Hee Park*)

- Conducted data analysis of *Squid Game* using BERTopic for Google movie review classification

12/2021 – 02/2022

Undergraduate Research Grant Recipient

Dept. of Communication, SNU (Advised by *Prof. Chul-joo Lee*)

- Led \$5,000-funded research project analyzing 740k tweets and 4k news articles to examine inter-media agenda setting dynamics in coverage of South Korea's Nth Room digital sex crime case

2020

WORK EXPERIENCE

Data Storyteller

2022 – Present

Independent Data Journalism & Data Visualization Specialist

- Developed a data story explaining the importance of dataset diagnostics for AI training through planning, storytelling, and web development (*Client: Peblous*)
- Designed and developed an interactive news article raising awareness about assisted dying, including web development and storytelling (*Client: Seoul Shinmun, [Link](#)*)
- Created a Supply Chain Dominance Explorer visualization dashboard for analyzing Economic Security Index data (*Client: Institute for Future Strategy, Seoul National University, [Link](#)*)
- Built an interactive exploration tool enabling users to compare educational academy statistics across neighborhoods (*Client: Kyunghyang Shinmun, [Link](#)*)
- Conceptualized and executed data-driven journalism analyzing sexual violence within churches, including story planning and statistical analysis (*Client: Newsnjoy*)
- Designed and developed an interactive 2022 opinion poll aggregator website for real-time election insights (*Client: Seoul Broadcasting System*)

Data Journalist Intern

06/2020 – 12/2020

SBS (Seoul Broadcasting System)

- Analyzed datasets using R for multiple investigative journalism projects, including abandoned pets, urban renewal programs, and child sex offender sentencing patterns
- Authored weekly articles covering data journalism trends and visualization awards

TEACHING EXPERIENCE

Teaching Assistant, Data Journalism

Spring 2025

Course: M1312.000800, SNU

- Assisted undergraduate students with Python programming for data journalism

Teaching Assistant, Creative Research (Human-centered AI)

Spring 2023, Spring 2024

Course: 2114.409 001, SNU

- Mentored undergraduate students on Python-based data analysis techniques

Teaching Assistant, Data Visualization

Spring 2021

Course: 2114.411 001, SNU

- Guided undergraduate students in conducting data visualization projects using R

Teaching Assistant, Data Journalism Workshop

09/2021, 11/2021

Professional Development Program, Korea Press Foundation

- Trained journalists in R programming for data analysis and visualization

OUTREACH & INVITED TALKS

Podcast Host

2023-2025

DataHolic

- Host weekly discussions on data visualization and AI research

Invited Talk

2025

UIUC SALT Lab Seminar

- Introduced the SPeCtrum framework for modeling human identity in LLM agents and presented research on Future Self AI clones for letter-exchange activities

Research Presentation

2024

<AI-Human Communication> NCCU-SNU-UTokyo Joint Symposium

- Presented research for modeling human identity in LLM agents

Mentoring Program DONG-A ILBO K-Digital Training (KDT) Program	2024
<ul style="list-style-type: none"> Mentored participants in interactive news content creation using generative AI 	
Guest Lecture DONG-A ILBO	2023
<ul style="list-style-type: none"> Delivered a guest lecture on data storytelling and journalism methods 	
Guest Lecture KAIST Dept. of Industrial Design	2021
<ul style="list-style-type: none"> Presented on infographics creation and data journalism career paths 	

SELECTED PRESS

An AI That Knows You Better Than Yourself: More Effective for Youth Career Counseling, Study Finds https://www.joongang.co.kr/article/25331159	2025 JoongAng News
Mockery Becomes Routine in National Assembly: SNU Research Shows Threefold Rise in Aggressive Party Statements https://www.kmib.co.kr/article/view.asp?arcid=0020529772&code=61111511	2024 Kukmin News
A Quantitative Look at Korea's 'Insult-Driven' Parliament: Seoul National University Study Finds Verbal Aggression Tripled https://www.yyna.co.kr/view/AKR20240913161900001	2024 Yonhap News

SERVICE

Reviewer	2025
<ul style="list-style-type: none"> ACM CHI ICWSM 	

SKILL

- Programming:** Python, R, HTML/CSS/JavaScript, SvelteKit, D3.js
- Design & Data Viz Tools:** Figma, Adobe Illustrator, Flourish, DataWrapper
- Language:** Korean(native), English(fluent)

REFERENCES

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