Donghoon Shin

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EDUCATION University of Washington, Seattle, WA

2022 -

- Ph.D., Human Centered Design & Engineering
- M.S., Human Centered Design & Engineering (concurrent with Ph.D.)
 - Advisor: Gary Hsieh & Lucy Lu Wang

Seoul National University, Seoul, Korea

2016 - 2022

- B.S., Electrical & Computer Engineering, Information Science
 - Graduated cum laude

RESEARCH INTERESTS

My research lies at the intersection of **Human-Computer Interaction (HCI)** and **Natural Language Processing (NLP)**. Throughout my research, I aim to transform complex academic insights in a way that is more accessible to practitioners and better aligned with their needs in various domains (*e.g.*, design, healthcare), thereby streamlining the evidence-based decision-making processes of practitioners.

EMPLOYMENT

Adobe Research, San Jose, CA

Jun 2024 - Oct 2024

- Research intern (Mentor: Gromit Chan)
 - Project: Persona-driven generative agents for design tools

Naver AI Lab, Seongnam, Korea

Jun 2023 – Sep 2023

- Research intern (Mentor: Young-Ho Kim)
 - Project: Personalizing evidence-based exercise plans with LLMs

Elecle, Seoul, Korea

Apr 2020 - Jun 2021

■ iOS developer

PUBLICATIONS

CONFERENCE & JOURNAL PAPER

[P11] Genomic Data Processing with GenomeFlow

Junseok Park, Eduardo A. Maury, Changhoon Oh, **Donghoon Shin**, Danielle Denisko, Eunjung Alice Lee

BMC Bioinformatics, 2024.

[P10] From Paper to Card: Transforming Design Implications with Generative AI

Donghoon Shin, Lucy Lu Wang, Gary Hsieh

CHI 2024. (26.4% acceptance rate)

[P9] AI-Assisted Causal Pathway Diagram for Human-Centered Design

Ruican Zhong*, **Donghoon Shin***, Rosemary Meza, Predrag Klasnja, Lucas Colusso, Gary Hsieh *co-first authorship

CHI 2024. (26.4% acceptance rate)

[P8] DiaryMate: Understanding User Perceptions and Experience in Human-AI Collaboration for Personal Journaling

Taewan Kim, Donghoon Shin, Young-Ho Kim, Hwajung Hong

CHI 2024. (26.4% acceptance rate)

[P7] PlanFitting: Tailoring Personalized Exercise Plans with Large Language Models

Donghoon Shin, Gary Hsieh, Young-Ho Kim

arXiv preprint.

- [P6] IntroBot: Exploring the Use of Chatbot-assisted Familiarization in Online Collaborative Groups Donghoon Shin, Soomin Kim, Ruoxi Shang, Joonhwan Lee, Gary Hsieh CHI 2023. (27.6% acceptance rate)
- [P5] How Older Adults Use Online Videos for Learning Seoyoung Kim, **Donghoon Shin**, Jeongyeon Kim, Sunwoo Kim, Juho Kim CHI 2023. (27.6% acceptance rate)
- [P4] Evaluating the Impact of Human Explanation Strategies on Human-AI Visual Decision-Making Katelyn Morrison, **Donghoon Shin**, Kenneth Holstein, Adam Perer *CSCW* 2023.
- [P3] Trkic G00gle: Why and How Users Game Translation Algorithms Soomin Kim, Changhoon Oh, Won Ik Cho, **Donghoon Shin**, Bongwon Suh, Joonhwan Lee CSCW 2021.
- [P2] Design Guidelines of Computer-based Intervention for Computer Vision Syndrome: Focus Group Study and In-the-wild Deployment
 - Youjin Hwang, **Donghoon Shin**, Jinsu Eun, Bongwon Suh, Joonhwan Lee *Journal of Medical Internet Research 23(3), 2021.*
- [P1] TalkingBoogie: Collaborative Mobile AAC System for Children with Developmental Disabilities and Their Caregivers

Donghoon Shin, Jaeyoon Song, Seokwoo Song, Jisoo Park, Joonhwan Lee, Soojin Jun *CHI 2020. (24.3% acceptance rate)*

Honorable Mention Award (top 5% among all submissions)

POSTER & WORKSHOP PAPER

- [W7] DiaryMate: Exploring the Roles of Large Language Models in Facilitating AI-mediated Journaling Taewan Kim, **Donghoon Shin**, Young-Ho Kim, Hwajung Hong CHI 2023 Workshop. (Intelligent and Interactive Writing Assistants)
- [W6] Exploring the Effects of AI-assisted Emotional Support Processes in Online Mental Health Community
 - **Donghoon Shin**, Subeen Park, Esther Hehsun Kim, Soomin Kim, Jinwook Seo, Hwajung Hong *CHI 2022 Extended Abstracts. (Late-Breaking Work)*
- [W5] Leveraging AI to Assist Emotional Supports in Online Mental Health Community Donghoon Shin, Subeen Park, Esther Hehsun Kim, Soomin Kim, Jinwook Seo, Hwajung Hong CHI 2022 Workshop. (Future of Emotion in HCI)
- [W4] Characterizing Human Explanation Strategies to Inform the Design of Explainable AI for Building Damage Assessment

Donghoon Shin, Sachin Grover, Kenneth Holstein, Adam Perer NeurIPS 2021 Workshop. (AI for Humanitarian Assistance and Disaster Response)

[W3] BlahBlahBot: Facilitating Conversation between Strangers using a Chatbot with ML-infused Personalized Topic Suggestion

Donghoon Shin, Sangwon Yoon, Soomin Kim, Joonhwan Lee *CHI 2021 Extended Abstracts. (Late-Breaking Work)*

[W2] Linguistic Features to Consider When Applying Persona of the Real Persona to the Text-based Agent

Youjin Hwang, Seokwoo Song, **Donghoon Shin**, Joonhwan Lee *MobileHCI 2020 Extended Abstracts. (Late-Breaking Results)*

[W1] Applying the Persona of User's Family Member and the Doctor to the Conversational Agents for Healthcare Youjin Hwang, Donghoon Shin, Sion Baek, Bongwon Suh, Joonhwan Lee CHI 2020 Workshop. (Conversational Agents for Health and Wellbeing) DOMESTIC CONFERENCE PAPER & TECHNICAL REPORT [D2] AmslerTouch: Self-testing Amsler Grid Application for Supporting a Quantitative Report of Age-related Macular Degeneration Symptoms **Donghoon Shin** HCIK 2022. [D1] An Analysis of K-MOOC Learners' Data and an Investigation of Its Future Applications Seoyoung Kim, Sunwoo Kwon, Donghoon Shin, Juho Kim Issue paper of Korea's National Institute for Lifelong Education, 2019. [C1] Method and Apparatus for Mimicking Conversational Style Mar 2021 Youjin Hwang, Joonhwan Lee, **Donghoon Shin** Republic of Korea Patent (10-2021-0032858) **Graduate School Conference Presentation Award**, University of Washington 2023 Conference presentation award for presenting a paper at the CHI conference Korean Government Scholar for Overseas Study, Republic of Korea 2022 - 2024 Around 50 postgrads selected annually **Graduate School Fellowship**, University of Washington 2022 • Scholarship awarded by the department to the selected incoming Ph.D. students Gary Marsden Travel Award, ACM SIGCHI 2022 Travel grant for attending the CHI conference Special Recognition for Outstanding Reviews, ACM CHI 2022 2021 Recognition for the paper review 2020 Honorable Mention Award, ACM CHI 2020 • Selected among the top 5% of paper submissions Presidential Science Scholarship, Republic of Korea 2020 - 2021 Merit-based scholarship for undergraduate studies funded by the Korean government Around 150 undergrads selected annually **Conference and Travel Scholarship**, Google 2020 Travel grant for attending the CHI conference (travel canceled due to COVID-19) Best Undergraduate Research Award, Seoul National University 2020 Ranked 1st among all the undergraduate research projects in 2019 **Undergraduate Research Grant**, Seoul National University 2019, 2021 ■ \$5,000 research grant Designing an AI support for assisting in group counseling for managing anxiety (2021) • Designing a collaborative mobile AAC system for children with developmental disabilities (2019)

Undergraduate merit-based scholarship

Merit-based Scholarship, Seoul National University

2016, 2017

PATENT

AWARDS &

HONORS

INVITED TALK	Azure, Microsoft • AI-assisted causal pathway diagramming for human-centered design	Jun 2024
	■ AI-assisted causar pathway diagramming for numan-centered design Dept. of Computer Science & Engineering, Seoul National University AI-assisted translational science for designers	May 2024
	 HCI Theory and Practice (2114.408A), Seoul National University Designing and building AI-assisted support for online mental health commun 	Apr 2022
	Dept. of Information Science & Culture, Seoul National University ■ Introduction to iOS programming	Oct 2018
	Dept. of Information Science & Culture , Seoul National University ■ Running an HCI research project as an undergrad	Apr 2020
TEACHING EXPERIENCE	Graduate Teaching Assistant, University of Washington ■ HCDE 511: Information Visualization (Winter 2024) ■ HCDE 538: Designing For Behavior Change (Fall 2023)	
	Undergraduate Teaching Assistant, Seoul National University■ L0444.000400: Basic Computing (Summer 2021)	
RESEARCH EXPERIENCE	 CoALA Lab & Data Interaction Group, Carnegie Mellon University Undergraduate research intern (Mentor: Kenneth Holstein & Adam Perer) 	Nov 2020 – Jan 2022
	HCI+d Lab, Seoul National University■ Undergraduate research intern (Mentor: Joonhwan Lee)	Aug 2019 – Oct 2020
SERVICES	Program Committee ■ ACM CHI (2024)	
	Reviewer ACM CHI (2020 – 2024) ACM CSCW (2024) ACM DIS (2023) ACM MobileHCI (2021) Journal of Medical Internet Research (2021)	
	Ph.D. Student Admission Reviewer, UW HCDEStudent reviewer for the Ph.D. admission	2022
	Student Volunteer ■ ACM ISS (2021)	
MENTORSHIP	Tony Zhou, Undergraduate student at UW CSE	2024
	Subin Jo, Undergraduate student at UW HCDE	2024
	Ivy Tseng, Masters student at UW MHCI+D	2024
	Yung-Jan Chang, Masters student at UW HCDE	2024
	Shin Hu, Undergraduate student at UW iSchool	2024
	Ruijingya Tang, Masters student at UW HCDE	2024
REFERENCES	Gary Hsieh	

Associate Professor, University of Washington

Lucy Lu Wang

• Assistant Professor, University of Washington

Joonhwan Lee

■ Professor, Seoul National University

[Last update: July 22, 2024]