# **Donghoon Shin**

### donghoon.io | dhoon@uw.edu

#### **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)**, **Natural Language Processing (NLP)**, and **design**. Throughout my research, I aim to transform complex academic insights in a way that is more accessible to design practitioners and better aligned with their needs, thereby streamlining their evidence-based design processes.

#### **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: Attributable exercise recommendations and planning with LLMs

Elecle, Seoul, Korea

Apr 2020 - Jun 2021

iOS developer

#### **PUBLICATIONS**

#### **CONFERENCE & JOURNAL PAPER**

- [P12] Tailoring Design Implications to Individual Designers' Needs with Generative AI Donghoon Shin, Alex Chen, Lucy Lu Wang, Gary Hsieh CHI 2025. (in submission)
- [P11] Understanding the Use of Collaborative Generative Agents in Designing Donghoon Shin, Gary Hsieh, Gromit Yeuk-Yin Chan CHI 2025. (in submission)
- [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 Agent	
	Healthcare Youjin Hwang, <b>Donghoon Shin</b> , Sion Baek, Bongwon Suh, Joonhwan Lee CHI 2020 Workshop. (Conversational Agents for Health and Wellbeing)	
PATENT	[C1] Method and Apparatus for Mimicking Conversational Style Youjin Hwang, Joonhwan Lee, <b>Donghoon Shin</b> Republic of Korea Patent (10-2021-0032858)	Mar 2021
AWARDS & HONORS	Graduate School Conference Presentation Award, University of Washington ■ Conference presentation award for presenting a paper at the CHI conference	2023
	<ul><li>Korean Government Scholar for Overseas Study, Republic of Korea</li><li>Around 50 postgrads selected annually</li></ul>	2022 – 2024
	<ul><li>Graduate School Fellowship, University of Washington</li><li>Scholarship awarded by the department to the selected incoming Ph.D. students</li></ul>	2022
	Gary Marsden Travel Award, ACM SIGCHI ■ Travel grant for attending the CHI conference	2022
	Special Recognition for Outstanding Reviews, ACM CHI 2022 ■ Recognition for the paper review	2021
	Honorable Mention Award, ACM CHI 2020 ■ Selected among the top 5% of paper submissions	2020
	<ul> <li>Presidential Science Scholarship, Republic of Korea</li> <li>Merit-based scholarship for undergraduate studies funded by the Korean government</li> <li>Around 150 undergrads selected annually</li> </ul>	2020 – 2021
	Conference and Travel Scholarship, Google ■ Travel grant for attending the CHI conference (travel canceled due to COVID-19)	2020
	<b>Best Undergraduate Research Award</b> , Seoul National University ■ Ranked 1 <sup>st</sup> among all the undergraduate research projects in 2019	2020
	<ul> <li>Undergraduate Research Grant, Seoul National University</li> <li>\$5,000 research grant</li> <li>Designing an AI support for assisting in group counseling for managing anxiety (2021)</li> <li>Designing a collaborative mobile AAC system for children with developmental disabilities</li> </ul>	2019, 2021 s (2019)
	<ul><li>Merit-based Scholarship, Seoul National University</li><li>Undergraduate merit-based scholarship</li></ul>	2016, 2017
INVITED TALK	<ul><li>Azure, Microsoft</li><li>AI-assisted causal pathway diagramming for human-centered design</li></ul>	Jun 2024
	<ul> <li>Dept. of Computer Science &amp; Engineering, Seoul National University</li> <li>AI-assisted translational science for designers</li> </ul>	May 2024
	<b>HCI Theory and Practice (2114.408A)</b> , Seoul National University ■ Designing and building AI-assisted support for online mental health communities	Apr 2022
	Dept. of Information Science & Culture, Seoul National University	Oct 2018

 Introduction to iOS programming **Dept. of Information Science & Culture**, Seoul National University Apr 2020 • Conducting an HCI research project as an undergrad **TEACHING Graduate Teaching Assistant**, University of Washington **EXPERIENCE** ■ 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) Nov 2020 - Jan 2022 RESEARCH CoALA Lab & Data Interaction Group, Carnegie Mellon University **EXPERIENCE**  Undergraduate research intern (Mentor: Kenneth Holstein & Adam Perer) HCI+d Lab, Seoul National University Aug 2019 - Oct 2020 Undergraduate research intern (Mentor: Joonhwan Lee) **SERVICES Program Committee** ■ ACM CHI (2024) Reviewer ■ CHI (2020 – 2024), CSCW (2024), DIS (2023), MobileHCI (2021), JMIR (2021) 2022 Ph.D. Student Admission Reviewer, UW HCDE 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 2024 Yung-Jan Chang, Masters student at UW HCDE 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]