Young-Ho Kim

Lead Research Scientist NAVER AI Lab yghokim@younghokim.net http://younghokim.net https://github.com/yghokim/ Google Scholar (<u>Link</u>)

Research Statement

My research is at the intersection of Personal Health Informatics, Human-Computer Interaction (HCI), and Ubiquitous Computing (UbiComp). I design, develop, and evaluate Personal Informatics (PI) technologies that empower people to better learn about themselves and make positive changes in their behaviors and thoughts. Recently, I have investigated how we can leverage (generative) AIs in PI systems to acknowledge and account for the lifelong challenges of marginalized populations.

AI-infused Systems for Health & Well-being

Flexible Human-Data Interaction in Personal Informatics

Employment

Nov 2021 - NAVER AI Lab

<u>Present</u> NAVER Corp. (Nov 2021 – Dec 2022) → NAVER Cloud (Jan 2023 – Present), Seongnam, Gyeonggi, Korea

Lead Research Scientist, HCI Research (Feb 2023 – Present)
Affiliated with Language Research (Feb 2023 – Present)
Affiliated with AI Safety Lab (Jan 2024 – Present)
Research Scientist, AI Research (July 2022 – Jan 2023)
Tech Lead, AI Research (July 2022 – Jan 2023)

Sep 2019 - University of Maryland, College Park, MD, USA

Nov 2021 Postdoctoral Associate, working with Dr. Eun Kyoung Choe

College of Information Studies & HCIL

Mar 2019 - Seoul National University, Seoul, Korea

Jul 2019 BK21 Postdoctoral Researcher, working with Dr. Jinwook Seo

Dept. of Computer Science & Engineering, College of Engineering

Apr 2011 – I-UM Socius, Seoul, Korea

Apr 2012 UI/UX Designer (a) Brand Experience Design Team

Education

Sep 2012 – Ph.D. in Electrical Engineering & Computer Science (Now CSE) [Outstanding Dissertation Award] (GPA: 96.6)

Feb 2019 Seoul National University, Korea

• Dept. of Computer Science & Engineering, College of Engineering

Advisor: Dr. Jinwook Seo

Dissertation: Designing Flexible Self-Tracking Technologies for Enhancing In Situ Data Collection Capability

Mar 2007 – Bachelor of Fine Arts in Design [Cum Laude] (GPA: 94.3)

Feb 2011 Seoul National University, Korea

Major of Visual Communication Design, Dept. of Craft & Design, College of Fine Arts

Advisor: Prof. Suzung Kim

Grants, Awards, and Recognitions

2025	Best Paper Award— ACM CHI 2025, Yokohama, Japan. [C26] (Corresponding-authored)		
2025	Honorable Mention Award—ACM CHI 2025, Yokohama, Japan. [C21] (Co-authored)		
2023	Best Paper Award—ACM CHI 2023, Hamburg, Germany. [C10] (Corresponding-authored)		
2022	Honorable Mention Award—ACM ISS 2022, Wellington, New Zealand. [J3] (Co-authored)		
2021	Honorable Mention Award—ACM CHI 2021, Yokohama, Japan. [C5] (First-authored)		
2020	Special Recognitions for Outstanding Reviews—2 recognitions for paper reviews at ACM CHI 2021		
2019	NRF of Korea International Postdoc Fellowship		
	Granted 45,000,000 KRW (equivalent to 40,000 USD) stipend for 1-year postdoctoral studies abroad.		
	Proposal title: Design and Development of a Multipurpose Research Platform for Effective Collection of		
	Mobile Health/Activity Data		
2019	Google Travel Grant—ACM CHI 2019, Glasgow, Scotland, UK		
2019	Outstanding Ph.D. Dissertation Award—Dept. of Computer Science & Engineering, Seoul National University		
2017	NAVER Ph.D. Fellowship Award—Granted 5,000,000 KRW (equivalent to 4,500 USD) from NAVER Corp.		
2011	iF Design Award Nominee—Social Dating Service, I-UM		
2011	Graduation with Distinction (Rank first)—Dept. of Craft & Design, Seoul National University		
2007–2011	Merit-based Scholarship, Seoul National University (Fully-supported tuition for 4 years)		

Publication

- Papers marked with • indicate those for which I served as the primary author (either first or corresponding).

International Journal Papers (Peer Reviewed)

[J7] The Explanation That Hits Home: The Characteristics of Verbal Explanations That Affect Human Perception in Subjective Decision-Making

Sharon Ferguson, Paula Akemi Aoyagui, Rimsha Rizvi, Young-Ho Kim, Anastasia Kuzminykh

PACM on Human-Computer Interaction (PACMHCI), 8 (CSCW2), 2024. Article 517.

Links: DOI

[J6] Leveraging Large Language Models to Power Chatbots for Collecting User Self-Reported Data

• Jing Wei, Sungdong Kim, Hyunhoon Jung, and Young-Ho Kim

PACM on Human-Computer Interaction (PACMHCI), 8 (CSCW1), 2024. Article 87.

Links: DOI, arXiv

[J5] Designing a Direct Feedback Loop between Humans and Convolutional Neural Networks through Local Explanation

Tong Sun, Yuyang Gao, Shubham Khaladkar, Sijia Liu, Liang Zhao, Young-Ho Kim, and Sungsoo Ray Hong

PACM on Human-Computer Interaction (PACMHCI), 7 (CSCW2), 2023. Article 338.

Links: DOI

[J4] Understanding the Consequences of Moment-by-Moment Fluctuations in Mood and Social Experience for Paranoid Ideation in Psychotic Disorders

Ryan D Orth*, Juyoen Hur*, Anyela M Jacome, Christina L G Savage, Shannon E Grogans, <u>Young-Ho Kim</u>, Eun Kyoung Choe, Alexander J Shackman, Jack J Blanchard (*: Co-first author)

Schizophrenia Bulletin Open, sgac064.

Links: DOI

[J3] NoteWordy: Investigating Touch and Speech Input on Smartphones for Personal Data Capture

[Best Paper Honorable Mention Award]

Yuhan Luo, Bongshin Lee, Young-Ho Kim, and Eun Kyoung Choe

PACM on Human-Computer Interaction (PACMHCI), 6 (ISS), Article 581. Also presented at ACM ISS'22.

Links: DOI, Video

[J2] Githru: Visual Analytics for Understanding Software Development History Through Git Metadata Analysis

Youngtaek Kim, Jaeyoung Kim, Hyeon Jeon, Young-Ho Kim, Hyunjoo Song, Bohyoung Kim, and Jinwook Seo

IEEE Transactions on Visualization and Computer Graphics (IEEE TVCG), Feb. 2021, 28.

Also presented at IEEE VIS'20 (VAST).

Links: DOI, Source code

[J1] OmniTrack: A Flexible Self-Tracking Approach Leveraging Semi-Automated Tracking

Young-Ho Kim, Jae Ho Jeon, Bongshin Lee, Eun Kyoung Choe, and Jinwook Seo

PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 1 (3), Article 67.

Also presented at ACM UbiComp'17, Maui, Hawaii, USA.

Links: DOI, Video, Web, Source code

International Conference Papers (Peer Reviewed)

[C26] AACessTalk: Fostering Communication between Minimally Verbal Autistic Children and Parents with Contextual

Guidance and Card Recommendation

[Best Paper Award] (top 1% of submissions)

Dasom Choi, SoHyun Park, Kyungah Lee, Hwajung Hong, and Young-Ho Kim

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate). No. 706.

Links: arXiv, Video, Web, Source code

[C25] ELMI: Interactive and Intelligent Sign Language Translation of Lyrics for Song Signing

Suhyeon Yoo, Khai N. Truong, and <u>Young-Ho Kim</u>

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate). No. 884. Links: arXiv, Video, Web, Source code

[C24] ExploreSelf: Fostering User-driven Exploration and Reflection on Personal Challenges with Adaptive Guidance by Large

Language Models

Inhwa Song, SoHyun Park, Sachin R. Pendse, Jessica Lee Schleider, Munmun De Choudhury, and Young-Ho Kim

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate). No. 796.

Links: arXiv, Video, Web, Source code

[C23] Understanding Public Agencies' Expectations and Realities of AI-Driven Chatbots for Public Health Monitoring

Eunkyung Jo, Young-Ho Kim, Sang-Houn Ok, and Daniel A. Epstein

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate).

Links: TBA

[C22] Enhancing Pediatric Communication: The Role of an AI-Driven Chatbot in Facilitating Child-Parent-Provider Interaction

Woosuk Seo, Young-Ho Kim, Ji Eun Kim, Megan Tao Fan, Mark S. Ackerman, Sung Won Choi, and Sun Young Park

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate).

Links: TBA

[C21] Textoshop: Interactions Inspired by Drawing Software to Facilitate Text Editing

[Best Paper Honorable Mention Award] (top 5% of submissions)

Damien Masson, Young-Ho Kim, and Fanny Chevalier

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate).

Links: arXiv, Interactive demo, Source code

[C20] Making the Write Connections: Linking Writing Support Tools with Writer Needs

Zixin Zhao, Damien Masson, Young-Ho Kim, Gerald Penn, and Fanny Chevalier

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate).

Links: arXiv, Web

[C19] "They Didn't Mean To": Leveraging The Diversity of Perspectives In LLM-Enhanced Subjective Decision-Making

Paula Akemi Aoyagui, Kelsey Stemmler, Sharon A. Ferguson, Young-Ho Kim, and Anastasia Kuzminykh

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'25, 25.1% Acceptance Rate).

Links: TBA

[C18] ChaCha: Leveraging Large Language Models to Prompt Children to Share Their Emotions about Personal Events

Woosuk Seo, Chanmo Yang, and Young-Ho Kim

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'24, 26.3% Acceptance Rate). No. 903.

Links: DOI, arXiv, Web, Video, Source code

[C17] MindfulDiary: Harnessing Large Language Model to Support Psychiatric Patients' Journaling

Taewan Kim, Seolyeong Bae, Hyun Ah Kim, Su-woo Lee, Hwajung Hong, Chanmo Yang*, and <u>Young-Ho Kim*</u>
 (*:Co-corresponding authors)

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'24, 26.3% Acceptance Rate). No. 701.

Links: DOI, arXiv

[C16] Understanding the Impact of Long-Term Memory on Self-Disclosure with Large Language Model-Driven Chatbots for

• Public Health Intervention

Eunkyung Jo, Yuin Jeong, SoHyun Park, Daniel A. Epstein, and Young-Ho Kim

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'24, 26.3% Acceptance Rate). No. 440.

Links: DOI, arXiv

[C15] DiaryMate: Understanding User Perceptions and Experience in Human-AI Collaboration for Personal Journaling

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

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'24, 26.3% Acceptance Rate). No. 1046.

Links: DOI

[C14] GenQuery: Supporting Expressive Visual Search with Generative Models

Kihoon Son, DaEun Choi, Tae Soo Kim, Young-Ho Kim, and Juho Kim

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'24, 26.3% Acceptance Rate). No. 180.

Links: DOI, arXiv, Web

[C13] EvalLM: Interactive Evaluation of Large Language Model Prompts on User-Defined Criteria

Tae Soo Kim, Yoonjoo Lee, Jamin Shin, Young-Ho Kim, and Juho Kim

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'24, 26.3% Acceptance Rate). No. 306.

Links: DOI, arXiv, Web

[C12] Redefining Activity Tracking Through Older Adults' Reflections on Meaningful Activities

Yiwen Wang, Mengying Li, <u>Young-Ho Kim</u>, Bongshin Lee, Margaret Danilovich, Amanda Lazar, David E Conroy, Hernisa Kacorri, Eun Kyoung Choe

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'24, 26.3% Acceptance Rate). No. 465. Links: DOI

[C11] The Bot on Speaking Terms: The Effects of Conversation Architecture on Perceptions of Conversational Agents

Christina Wei, Young-Ho Kim, and Anastasia Kuzminykh

Proc. ACM Conference on Conversational User Interfaces (CUI'23, 38.33% Acceptance Rate). No. 18. Links: <u>DOI</u>

[C10] Understanding the Benefits and Challenges of Deploying Conversational AI Leveraging Large Language Models

• for Public Health Intervention

[Best Paper Award] (top 1% of submissions)

Eunkyung Jo, Daniel A. Epstein, Hyunhoon Jung, Young-Ho Kim

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'23, 28.39% Acceptance Rate). No. 18. Links: <u>DOI, Video</u>

[C9] AVscript: Accessible Video Editing with Audio-Visual Scripts

Mina Huh, Saelyne Yang, Yi-Hao Peng, Xiang 'Anthony' Chen, Young-Ho Kim, and Amy Pavel

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'23, 28.39% Acceptance Rate). No. 796. Links: DOI, Video

[C8] DataHalo: A Customizable Notification Visualization System for Personalized and Longitudinal Interactions

Guhyun Han, Jaehun Jung, Young-Ho Kim*, and Jinwook Seo* (*:Co-corresponding authors)

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'23, 28.39% Acceptance Rate). No. 648. Links: <u>DOI, Video</u>

[C7] MyMove: Facilitating Older Adults to Collect In-Situ Activity Labels on a Smartwatch with Speech

 Young-Ho Kim, Diana Chou, Bongshin Lee, Margaret Danilovich, Amanda Lazar, David E. Conroy, Hernisa Kacorri, and Eun Kyoung Choe

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'22, 24.7% Acceptance Rate). No. 416. Links: <u>DOI, Video, Web</u>

[C6] FoodScrap: Promoting Rich Data Capture and Reflective Food Journaling Through Speech Input

Yuhan Luo, Young-Ho Kim, Bongshin Lee, Naeemul Hassan, and Eun Kyoung Choe

Proc. ACM Designing Interactive Systems Conference (DIS'21, 26.8% Acceptance Rate). 606-618.

Links: <u>DOI</u>, <u>Video</u>

[C5] Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction

• [Best Paper Honorable Mention Award] (top 5% of the submissions)

Young-Ho Kim, Bongshin Lee, Arjun Srinivasan, and Eun Kyoung Choe

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'21, 26.3% Acceptance Rate). No. 462. Links: DOI, Video, Web, Source code

[C4] Visualization Support for Multi-criteria Decision Making in Software Issue Propagation

Youngtaek Kim, Hyeon Jeon, Young-Ho Kim, Yuhoon Ki, Hyunjoo Song, and Jinwook Seo

Proc. IEEE Pacific Visualization Symposium (Pacific Vis'21), 81-85, Note.

Links: DOI

[C3] Toward Becoming a Better Self: Understanding Self-Tracking Experiences of Adolescents with Autism Spectrum Disorder Using Custom Tracker

Sung-In Kim, Eunkyung Jo, Myeonghan Ryu, Inha Cha, Young-Ho Kim, Heejeong Yoo, and Hwajung Hong

Proc. EAI Intl. Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth'19). 169-178.

Link: DOI

[C2] Understanding Personal Productivity: How Knowledge Workers Define, Evaluate, and Reflect on Their Productivity

• Young-Ho Kim, Eun Kyoung Choe, Bongshin Lee, and Jinwook Seo

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI'19, 23.8% Acceptance Rate). No. 615. Links: DOI, Video

[C1] TimeAware: Leveraging Framing Effects to Enhance Personal Productivity

• Young-Ho Kim, Jae Ho Jeon, Eun Kyoung Choe, Bongshin Lee, KwonHyun Kim, and Jinwook Seo

Proc. ACM CHI Conference on Human Factors in Computing Systems (CHI '16, 23.4% Acceptance Rate). 272–283.

Links: DOI, Video

Extended Abstracts and Workshop Papers (Lightly Peer Reviewed)

[W12] Revealing User Familiarity Bias in Task-Oriented Dialogue via Interactive Evaluation

[Best Paper]

Takyoung Kim, Jamin Shin, Young-Ho Kim, Sanghwan Bae, and Sungdong Kim

ACL 2024 Workshop on NLP for Conversational AI

[W11] Towards Designing a Safe and Reliable LLM-driven Chatbot for Children

Woosuk Seo, Sun Young Park, Mark Ackerman, Chan-Mo Yang, and <u>Young-Ho Kim</u>
 CHI 2024 Workshop on Human-centered Evaluation and Auditing of Language Models (HEAL@CHI'24)

[W10] Evaluating and Auditing LLM-Driven Chatbots for Psychiatric Patients in Clinical Mental Health Settings

Taewan Kim, Seolyeong Bae, Hyun Ah Kim, Su-woo Lee, Hwajung Hong, Chanmo Yang*, and <u>Young-Ho Kim</u>*
 (*:Co-corresponding authors)

CHI 2024 Workshop on Human-centered Evaluation and Auditing of Language Models (HEAL@CHI'24)

[W9] Incorporating Multi-Stakeholder Perspectives in Evaluating and Auditing of Health Chatbots

[Highlight Oral Presentation]

Eunkyung Jo, Young-Ho Kim, Yuin Jeong, SoHyun Park, and Daniel Epstein

CHI 2024 Workshop on Human-centered Evaluation and Auditing of Language Models (HEAL@CHI'24)

[W8] EvalLM: Interactive Evaluation of Large Language Model Prompts on User-Defined Criteria

Tae Soo Kim, Yoonjoo Lee, Jamin Shin, Young-Ho Kim, and Juho Kim

CHI 2024 Workshop on Human-centered Evaluation and Auditing of Language Models (HEAL@CHI'24)

[W7] Just Like Me: The Role of Opinions and Personal Experiences in The Perception of Explanations in Subjective Decision-Making

Sharon Ferguson, Paula Aoyagui, and Young-Ho Kim and Anastasia Kuzminykh

CHI 2024 Workshop on Trust and Reliance in Evolving Human-AI Workflows (TREW@CHI'24)

[W6] Unveiling Disparities in Web Task Handling Between Human and Web Agents

Kihoon Son, Jinhyeon Kwon, DaEun Choi, Tae Soo Kim, <u>Young-Ho Kim</u>, Sangdoo Yun, and Juho Kim

CHI 2024 Workshop on Computational User Interface

[W5] Computational Approaches for App-to-App Retrieval and Design Consistency Check

Seokhyeon Park*, Wonjae Kim*, Young-Ho Kim, and Jinwook Seo (*: equal contribution)

ICML 2023 Workshop on Artificial Intelligence & Human-Computer Interaction

[W4] DiaryMate: Exploring the Roles of Large Language Models in Facilitating AI-mediated Journaling

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

ACM CHI'23 Workshop on Intelligent and Interactive Writing Assistants (In2Writing)

[W3] Can AI Support Fiction Writers Without Writing For Them?

Jessi Stark, Anthony Tang, Young-Ho Kim, Joonsuk Park, and Daniel Wigdor

ACM CHI'23 Workshop on Intelligent and Interactive Writing Assistants (In2Writing)

[W2] Leveraging Pre-Trained Language Models to Streamline Natural Language Interaction for Self-Tracking

Young-Ho Kim, Sungdong Kim, Minsuk Chang, and Sang-Woo Lee

NAACL '22 Workshop on "Bridging Human-Computer Interaction and Natural Language Processing" Links: arXiv, Video

[W1] Examining the Role of Conversational AI in Personal Informatics Systems for Collaborative Health Work and Care

Eunkyung Jo, Young-Ho Kim, Yuin Jeong, Hyeri Kim, Hyun Jung Park, and Daniel A. Epstein

ACM CHI '22 Workshop on "Grand Challenges for Personal Informatics and AI"

Organized Workshops and Tutorials

[O1] Design and Prototype Conversational Agents for Research Data Collection

Jing Wei, Young-Ho Kim, Samantha W. T. Chan, and Tilman Dingler

Tutorial at ACM Interactive Surfaces and Spaces Conference (ACM ISS) 2022.

Links: Program

Computing Systems as Research Artifacts

AACessTalk (Tablet) - Artifact for [C26]

An LLM-infused tool for lyric-to-sign-language translation for d/Deaf users.

- Role: Technical implementation (in collaboration), Design (in collaboration)
- Contributors: Young-Ho Kim, Dasom Choi, SoHyun Park, Kyungah Lee, Hwajung Hong

Open-sourced (https://naver-ai.github.io/aacesstalk)

ELMI (Web) – Artifact for [C25]

An LLM-infused tool for lyric-to-sign-language translation for d/Deaf users.

- Role: Technical implementation (in collaboration), Design (in collaboration)
- Contributors: Young-Ho Kim, Suhyeon Yoo, Khai N. Truong

Open-sourced (https://naver-ai.github.io/elmi)

ExploreSelf (Web) – Artifact for [C24]

An LLM-driven exploration tool for personal challenges and mental health.

- Role: Technical implementation (in collaboration), Design (in collaboration)
- Contributors: Inhwa Song, Young-Ho Kim, SoHyun Park, Sachin R. Pendse, Jessica Lee Schleider, Munmun De Choudhury
 Open-sourced (https://naver-ai.github.io/exploreself)

ChaCha (Mobile) – Artifact for [C18]

An LLM-driven chatbot for children

- Role: Technical implementation, Design (in collaboration)
- Contributors: Young-Ho Kim, Woosuk Seo
- Open-sourced (https://naver-ai.github.io/chacha)

MindfulDiary (Web) – Artifact for [C17]

A patient diary app for journaling everyday events and emotions through free-form conversation with an LLM-driven chatbot..

- Role: Design (in collaboration)
- Contributors: Taewan Kim, Seolyeong Bae, Hyun Ah Kim, Hwajung Hong, Chanmo Yang, and Young-Ho Kim

DiaryMate (Web) – Artifact for [C15]

A web diary app powered by large language model (NAVER HyperCLOVA) for various writing support and empathetic features..

- Role: Design (in collaboration)
- Contributors: Taewan Kim, Donghoon Shin, Young-Ho Kim, and Hwajung Hong

AVScript (Web) – Artifact for [C9]

A script- and computer-vision-based video editing tool for blind content creators leveraging their own video footage.

- Role: Design (in collaboration)
- · Contributors: Mina Huh, Saelyne Yang, Yi-Hao Peng, Xiang 'Anthony' Chen, Young-Ho Kim, and Amy Pavel

MyMove Watch (Android Wear OS) – Artifact for [C7]

A smartwatch application that facilitates older adults to collect their in-situ activity labels with speech.

- Role: Design (in collaboration), implementation of the entire system
- Contributors: Young-Ho Kim, Diana Chou, Bongshin Lee, Margaret Danilovich, Amanda Lazar, David E. Conroy, Hernisa Kacorri, and Eun Kyoung Choe

Data@Hand (iOS, Android) - Artifact for [C5]

A cross-platform mobile application that leverages speech and touch interactions to facilitate visual exploration of self-tracking data.

- Role: Design (in collaboration), implementation of the entire system
- Contributors: Young-Ho Kim, Bongshin Lee, Arjun Srinivasan, and Eun Kyoung Choe
- Open-sourced (https://data-at-hand.github.io)

Githru (Web) – Artifact for [J2]

A visual analytics system for understanding software development history through Git metadata analysis.

- Role: Implementation (in collaboration) of the frontend components, improvement of the GUI aesthetics
- Contributors: Youngtaek Kim, Jaeyoung Kim, Hyeon Jeon, Young-Ho Kim, Hyunjoo Song, Bohyoung Kim, and Jinwook Seo
- Open-sourced (https://githru.github.io/demo/)

OmniTrack for Research (Web, Android)

A research platform to implement, conduct, and manage mobile-based in-sisu data collection studies without coding.

- Role: Design (in collaboration), implementation of the entire system
- Contributors: Young-Ho Kim, Bongshin Lee, Jinwook Seo, Eun Kyoung Choe, Junhoe Kim, and Valérie Erb
- Used to conduct studies in [C2], [C3], [C6]
- Open-sourced (https://omnitrack.github.io/research)

OmniTrack (Android) – Artifact for [J1]

A flexible self-tracking app that supports constructing personalizable trackers leveraging semi-automated tracking.

- Role: Design (in collaboration), implementation of the entire system
- Contributors: Young-Ho Kim, Jae Ho Jeon, Bongshin Lee, Eun Kyoung Choe, and Jinwook Seo
- Open-sourced (https://omnitrack.github.io)

TimeAware (MacOS, Windows, Web) – Artifact for [C1]

A desktop-based screen time monitoring widget.

- Role: Design (in collaboration), implementation of the entire platform
- Contributors: Young-Ho Kim, Jae Ho Jeon, Eun Kyoung Choe, Bongshin Lee, and Jinwook Seo

Teaching Experience

2020 Fall; University of Maryland, College Park, MD, USA

2019 Fall

Guest Lecturer, invited by Prof. Eun Kyoung Choe

- INST 682 / CMSC838X: Personal Health Informatics & Visualization
- 2020: Provided a tutorial lecture on "Time-series visualization of personal data using Tableau."
- 2019: Provided a guest lecture on "Mobile-based in-situ data collection."

2019 Spring Seoul National University, Seoul, Korea

Graduate Teaching Assistant, worked with Prof. Jinwook Seo

- 4190.426A, Information to Human-Computer Interaction (CSE Undergraduate), 23 students
- Provided a tutorial lecture on in-situ data collection and personal informatics.
- Designed and wrote a class project (topic: Understanding People via Mobile In-Situ Data Collection).
- Advised 11 class project teams (23 students).
- Advised on writing a project proposal, setting up study instrumentation, giving presentations, and writing a project report.

2016 Fall Seoul National University, Seoul, Korea

Graduate Teaching Assistant, worked with Prof. Jinwook Seo

- M1522.000500, Information Visualization & Visual Analytics (CSE Graduate), 45 students
- Provided a tutorial lecture on D3.js.
- Wrote D3.js assignments, wrote D3.js problems for midterm exam, graded assignments and exam, and held office hours.

2015 Fall Korea University, Seoul, Korea

Guest lecturer, invited by Prof. Jaegul Choo

- AAA638, Computational and Visual Analytics (CS Graduate)
- D3.js tutorial lecture (2.5 hours)

2013 Fall Seoul National University, Seoul, Korea

Graduate Teaching Assistant, worked with Prof. Jinwook Seo

- 4190.103A, Programming Practice (CSE Undergraduate), 50 students
- Designed material for a weekly C programming lab session, wrote programming assignments, led lab sessions, graded assignments, and held office hours.

Student Mentorship & Collaboration

Jungeun Lee, POSTECH CS PhD student Mentoring research internship.	NAVER AI Lab Mar 2025 – Sep 2025
Yeonsun Yang, DGIST EECS PhD student Mentoring research internship.	NAVER AI Lab Mar 2025 – Sep 2025
Migyeong Yang, Sungkyunkwan University AI PhD candidate Mentoring research internship.	NAVER AI Lab Mar 2025 – Sep 2025
Suhyeon Yoo, University of Toronto CS PhD student Mentoring research internship on AI tool for d/Deaf song signers. Coauthored [C25].	NAVER AI Lab Jun 2024 – Sep 2024
Inhwa Song, KAIST CS Undergraduate student Mentoring research internship on AI tool for user-driven exploration of personal challenges. Coauthored [C24].	NAVER AI Lab Mar 2024 – Sep 2024
Dasom Choi, KAIST Industrial Design PhD student Mentoring research internship on an AI-based communication mediation system for minimally verbal autistic children and parents. Coauthored [C26].	NAVER AI Lab Mar 2024 – Aug 2024
Donghoon Shin , University of Washington HCDE PhD student Mentoring research internship on building a conversational AI for personalized health planning. Coauthored [C15].	NAVER AI Lab Jun 2023 – Sep 2023
Woosuk Seo, University of Michigan Informatics PhD candidate Mentoring research internship on building a chatbot for children's emotional intelligence. Coauthored [C18] [W11] [C22].	NAVER AI Lab Jun 2023 – Oct 2023
Christina Wei, University of Toronto Informatics PhD student Co-mentoring on understanding relationship between conversational architecture and user perception, with Prof. Anastasia Kuzminykh. Coauthored [C11].	NAVER AI Lab Sep 2022 – Present
Sukhyun Lee, Yonsei University Computer Science MS student Mentoring research internship on scanning paper-based self-trackers.	NAVER AI Lab Jan 2023 – Jul 2023
Taewan Kim, KAIST Industrial Design PhD student Mentoring research internship on designing AI-mediated diary writing for depression patients. Coauthored [C15] [C17] [W4] [W10].	NAVER AI Lab Jan 2023 – Jul 2023
Takyoung Kim, Research Intern at NAVER AI Lab Collaborated on assessing user biases in task-oriented dialogue systems. Coauthored [A1].	NAVER AI Lab Oct 2022 – Jan 2023
Jessi Stark, University of Toronto CS PhD student Co-mentoring on designing AI tools for fiction writer, with Prof. Anthony Tang. Coauthored [W3].	NAVER AI Lab Sep 2022 – Sep 2023
Eunkyung Jo, UC Irvine Informatics PhD student Mentored research internship on understanding the role of conversational AI in health work. Coauthored [C3] [D7] [W1] [C10] [C16] [C23].	NAVER AI Lab Jun 2022 – Sep 2022, Jun 2023 – Oct 2023

Jing Wei, University of Melbourne CIS PhD student Mentored research internship on building data collection chatbots using large language model. Coauthored [J6] [O1].	NAVER AI Lab May 2022 – Jul 2022
Mina Huh, PhD student at University of Texas, Austin Co-mentored research internship on designing video editing tools for blind people. Coauthored [C9].	NAVER AI Lab Mar 2022 – Jun 2022
Seokhyeon Park, SNU CS PhD student Co-mentoring research internship on building machine learning models with mobile UIs. Coauthored [W5].	NAVER AI Lab Feb 2022 – Jul 2022
Taeyoon Kim, UNIST M.S. student. Co-mentoring on designing effective visual intervention on Youtube usage.	NAVER AI Lab Nov 2021 – Feb 2022
Jong Ho Lee, iSchool PhD student. Collaborated on developing mobile activity reporting app for older adults and stroke patients.	University of Maryland Sep 2021 – Nov 2021
Lining Wang, iSchool PhD student. Collaborated on analyzing older adults' verbal activity reports and on-body sensor data from the Machine Learning perspective.	University of Maryland Aug 2021 – Nov 2021
Sabahat Fatima, CS Undergraduate. Currently a research engineer at the Johns Hopkins University Collaborated on analyzing older adults' verbal activity reports and on-body sensor data from the Machine Learning perspective.	University of Maryland Apr 2021 – Nov 2021
Diana Chou, CS M.S. student. Collaborated on designing and developing a mobile application for teachable interface for personalized activity recognition of older adults and stroke patients. Coauthored [C7].	University of Maryland Feb 2021 – Sep 2021
Yuhan Luo, iSchool PhD student. Currently Assistant Professor at CityU Hong Kong. Collaborated on understanding the effects of speech inputs on capturing everyday food practice compared to text typing. Coauthored [C6] [J3].	University of Maryland Mar 2020 - Nov 2020
GuHyun Han, CSE PhD student. Collaborated on designing and evaluating a customizable ambient visualization system for smartphone notifications. Coauthored [C8].	Seoul National University Feb 2019 - Jul 2019
Youngtack Kim, CSE PhD student. Currently at Samsung Electronics. Collaborated on designing a source code repository visualization framework, supported by Samsung electronics. Coauthored [J2] [C4].	Seoul National University Mar 2017 - Jul 2019
Sung-In Kim, College of Medicine undergraduate. Currently a public health physician. Advised an independent study on how customizable self-tracking app could support habit formation of autistic adolescents. Coauthored [C3] [D7].	Seoul National University Dec 2017 - Feb 2019
Valérie Erb, CS undergraduate at University of Zurich. Currently a MS student at KAIST CT. Advised an internship project on contributing to implementation of OmniTrack for Research, a mobile-based in-situ data collection platform.	Seoul National University Feb 2018 - Jun 2018
Junhoe Kim, CSE undergraduate. Currently at NCSoft Korea. Advised an internship project on contributing to implementation of OmniTrack [J1].	Seoul National University Feb 2018 - Jul 2018

Talks & Panels

Designing LLM-driven Conversational AIs for Marginalized Populations Seoul National University Jan 2025 Invited Talk at AI/Computing Frontier Seminar **Designing Inclusive AI for Marginalized Populations** NAVER Dec 2024 12th NULI Webinar **Designing LLM-driven Personal Informatics Systems for Marginalized Populations** Sungkyunkwan University Department Talk (Applied AI) Dec 2024 **Designing LLM-driven Conversational AIs for Marginalized Populations** Yonsei University Department Talk (Graduate School of Communication) Nov 2024 Designing LLM-driven Personal Informatics Systems for Marginalized Populations POSTECH Nov 2024 Department Talk (Graduate School of AI) **Designing LLM-driven Personal Informatics Systems for Marginalized Populations** Korean Society of Design and Panel Talk at Special Session for 'Design for Healthcare' Science Fall Intl. Conference Nov 2024 **Designing LLM-driven Conversational AIs for Marginalized Populations** Yonsei University Invited Talk (Graduate School of Information) Oct 2024 Structuring Knowledge from Semi-Structured Personal Informatics Systems with Large Seoul National University Dec 2023 Language Models Department Talk (Computer Science) **HCI Research & Career Paths** KAIST Jun 2023 Panel Talk at the Introduction to HCI class (Instructor: Juho Kim) Case Study of CLOVA CareCall: Benefits and Challenges of Deploying Conversational AI KAIST May 2023 Leveraging Large Language Models for Public Health Intervention Invited Talk at @TABLE seminar of Aging & Technology Policy Lab (Grad school of science and technology policy) Advancing Self-Tracking through Flexible Human-Data Interaction and AI Soongsil University Mar 2023 Department Talk (Computer Science) How to Become a World-Leading HCI Researcher in Korea HCI Korea 2023 Feb 2023 Panel Talk (with Prof. Jaeyeon Lee, Uran Oh, Auk Kim, Yoonji Kim, and Seongjae Oh) Advancing Self-Tracking through Flexible Human-Data Interaction and AI Soongsil University Dec 2022 Department Talk (Computer Science) Advancing Self-Tracking through Flexible Human-Data Interaction and AI SEOULTECH Dec 2022 Invited Talk at AI Colloquium (Dept. of Applied Artificial Intelligence) Collecting, Visualizing, and Telling about Personal Data KAIST Nov 2022 Invited Talk at Smart Health class (School of Computing)

When Design Meets Engineering: HCI, Information Visualization, and Multimodal Interaction Department Talk (Visual Communication Design)	Sangmyung University Oct 2022
Advancing Self-Tracking through Flexible Human-Data Interaction Department Talk (Design)	UNIST Apr 2022
Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction Distinguished Research Seminar at HCI Korea 2022	Online Feb 2022
Advancing Self-Tracking through Flexible Human-Data Interaction Invited Talk, hosted by Dr. Hyunggu Jung (Dept. of Computer Science & Engineering)	University of Seoul Dec 2021
Advancing Self-Tracking through Flexible Human-Data Interaction Department Talk (Industrial Design)	KAIST Oct 2021
Advancing Personal Tracking through Flexible Human-Data Interaction EIRIC CHI 2021 Review Seminar	EIRIC Jun 2021
Advancing Self-Tracking through Flexible Human-Data Interaction AI Research Talk	NAVER AI Lab Jun 2021
Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction HCIL Symposium 2021	Human-Computer Interaction Lab, University of Maryland May 2021
Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction SoDa Research Roundtables	Social Data Science Center University of Maryland Apr 2021
Advancing Self-Tracking through Flexible Human-Data Interaction Department Talk (Computer Science)	Stevens Institute of Technology Mar 2021
Visible Language Meets Engineering Language: Designing Interactive Information Visualization Systems to Nudge People 'Dessert Seminar' (BBL)	Korea Institute of Design Promotion Apr 2019
HCI, Personal Informatics, and Information Visualization: Being (Surviving as) an HCI Researcher in Engineering Fields without Losing Designer's Soul Guest Lecture in Design Research Class (Dept. of Design), hosted by Mingu Lee	Seoul National University Mar 2019
Designing Flexible Self-Tracking Technologies to Enhance <i>In Situ</i> Data Collection Invited Talk, hosted by Dr. Gwang Uk Kim (Dept. of Computer Science)	Hanyang University Mar 2019
Understanding Personal Productivity: How Knowledge Workers Define, Evaluate, and Reflect on Productivity $ \label{eq:controlled} The~4^{th}~SNU~HCI~Group~Summit $	Seoul National University Aug 2018
Designing the HCI Technology for Flexible, Semi-Automated Personal Tracking Experience Invited Talk, hosted by Dr. Hwajung Hong (Dept. of Communication)	Seoul National University Apr 2018

Designing the HCI Technology for Flexible, Semi-Automated Personal Tracking Experience

Invited Speaker at NAVER Tech Talk

NAVER Corp., Korea Mar 2018

A Flexible Self-Tracking Approach Leveraging Semi-Automated Tracking

The 3rd SNU HCI Group Summit

Seoul National University

Aug 2017

Leveraging Framing Effects to Enhance Personal Productivity

The 2nd SNU HCI Group Summit

Seoul National University
Aug 2016

Service

Reviewer ACM CHI (2017, 2019, 2020, 2021, 2022, 2023)

PACM IMWUT (2017 Aug, 2019 Nov, 2020 Aug, 2022 Aug, 2022 Nov, 2023 Nov)

PACM HCI CSCW (2022 July, 2023 Jan, 2024 Jul)

IEEE VIS (2021)

IEEE Transactions on Visualization and Computer Graphics (2024)

ACM DIS (2018, 2021, 2022, 2023)

ACM MobileHCI (2020)

ACM Transactions on Computer-Human Interaction (2021, 2024)

INTERACT (2019, 2021)

IEEE Pervasive Computing (2021) Eurographics EuroVis (2022) IEEE PacificVis (2024) PLOS Digital Health (2022)

Committee ACM CSCW (Associate Chair in Program Committee) – January 2024 cycle

ACM CHI (Associate Chair in Program Committee) – Health subcommittee (2024, 2025)

IEEE PacificVis 2023 (Associate Chair in Program Committee)

IEEE PacificVis 2017 (Design Chair)

Workshop on Ubiquitous Personal Assistance in ACM UbiComp 2018, 2019 (Technical Program Committee)

Seoul National University, Organizing Committee of SNU HCI Group Summit (2016, 2017)

Seoul National University, HCI Winter School Organizing Committee (2016)

Thesis Committee Seokhyeon Park, PhD in Computer Science and Engineering, Seoul National University, Seoul, Korea (2025)

Youjin Choi, PhD in School of Integrated Technology, GIST, Gwangju, Korea (2025) JooYeong Kim, PhD in School of Integrated Technology, GIST, Gwangju, Korea (2024) Eunkyung Jo, PhD in Dept. of Informatics at University of California, Irvine, CA, USA (2024) Taeyoon Kim, Master in Dept. of Industrial Design at UNIST, Ulsan, Korea (2021 Winter)

Student Volunteer IEEE PacificVis 2017

ACM CHI 2016