Young-Ho Kim

Lead Research Scientist
NAVER AI Lab

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https://github.com/yghokim/
Google Scholar (Link)

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 – Present
NAVER AI Lab
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 – Nov 2021
University of Maryland, College Park, MD, USA
Postdoctoral Associate, working with Dr. Eun Kyoung Choe
College of Information Studies & HCIL

Mar 2019 – Jul 2019
Seoul National University, Seoul, Korea
BK21 Postdoctoral Researcher, working with Dr. Jinwook Seo
Dept. of Computer Science & Engineering, College of Engineering

Apr 2011 – Apr 2012
I-UM Socius, Seoul, Korea
UI/UX Designer @ Brand Experience Design Team

Education

Sep 2012 – Feb 2019
Ph.D. in Electrical Engineering & Computer Science (Now CSE) [*Outstanding Dissertation Award*] (GPA: 96.6)
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 – Feb 2011
Bachelor of Fine Arts in Design [*Cum Laude*] (GPA: 94.3)
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

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 **Best of CHI 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 (**CSCW**2), 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 (**CSCW**1), 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 (**CSCW**2), 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, Young-Ho Kim, 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**
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 Young-Ho Kim

*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**
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 Young-Ho Kim*
(*: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, Young-Ho Kim, 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: DOI

[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: DOI, Video

[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: DOI, Video

[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: DOI, Video, Web

[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: DOI, Video

[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 (**PacificVis'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 Young-Ho Kim

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 Young-Ho Kim*
(*: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, Young-Ho Kim, 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; 2019 Fall — **University of Maryland,** College Park, MD, USA
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 — *NAVER AI Lab*
Mentoring research internship. — *Mar 2025 – Sep 2025*

Yeonsun Yang, DGIST EECS PhD student — *NAVER AI Lab*
Mentoring research internship. — *Mar 2025 – Sep 2025*

Migyeong Yang, Sungkyunkwan University AI PhD candidate — *NAVER AI Lab*
Mentoring research internship. — *Mar 2025 – Sep 2025*

Suhyeon Yoo, University of Toronto CS PhD student — *NAVER AI Lab*
Mentoring research internship on AI tool for d/Deaf song signers. Coauthored [C25]. — *Jun 2024 – Sep 2024*

Inhwa Song, KAIST CS Undergraduate student — *NAVER AI Lab*
Mentoring research internship on AI tool for user-driven exploration of personal challenges. Coauthored [C24]. — *Mar 2024 – Sep 2024*

Dasom Choi, KAIST Industrial Design PhD student — *NAVER AI Lab*
Mentoring research internship on an AI-based communication mediation system for minimally verbal autistic children and parents. Coauthored [C26]. — *Mar 2024 – Aug 2024*

Donghoon Shin, University of Washington HCDE PhD student — *NAVER AI Lab*
Mentoring research internship on building a conversational AI for personalized health planning. Coauthored [C15]. — *Jun 2023 – Sep 2023*

Woosuk Seo, University of Michigan Informatics PhD candidate — *NAVER AI Lab*
Mentoring research internship on building a chatbot for children's emotional intelligence. Coauthored [C18] [W11] [C22]. — *Jun 2023 – Oct 2023*

Christina Wei, University of Toronto Informatics PhD student — *NAVER AI Lab*
Co-mentoring on understanding relationship between conversational architecture and user perception, with Prof. Anastasia Kuzminykh. Coauthored [C11]. — *Sep 2022 – Present*

Sukhyun Lee, Yonsei University Computer Science MS student — *NAVER AI Lab*
Mentoring research internship on scanning paper-based self-trackers. — *Jan 2023 – Jul 2023*

Taewan Kim, KAIST Industrial Design PhD student — *NAVER AI Lab*
Mentoring research internship on designing AI-mediated diary writing for depression patients. Coauthored [C15] [C17] [W4] [W10]. — *Jan 2023 – Jul 2023*

Takyoung Kim, Research Intern at NAVER AI Lab — *NAVER AI Lab*
Collaborated on assessing user biases in task-oriented dialogue systems. Coauthored [A1]. — *Oct 2022 – Jan 2023*

Jessi Stark, University of Toronto CS PhD student — *NAVER AI Lab*
Co-mentoring on designing AI tools for fiction writer, with Prof. Anthony Tang. Coauthored [W3]. — *Sep 2022 – Sep 2023*

Eunkyung Jo, UC Irvine Informatics PhD student — *NAVER AI Lab*
Mentored research internship on understanding the role of conversational AI in health work. Coauthored [C3] [D7] [W1] [C10] [C16] [C23]. — *Jun 2022 – Sep 2022, Jun 2023 – Oct 2023*

Jing Wei, University of Melbourne CIS PhD student — *NAVER AI Lab*
Mentored research internship on building data collection chatbots using large language model. Coauthored [J6] [O1]. — *May 2022 – Jul 2022*

Mina Huh, PhD student at University of Texas, Austin — *NAVER AI Lab*
Co-mentored research internship on designing video editing tools for blind people. Coauthored [C9]. — *Mar 2022 – Jun 2022*

Seokhyeon Park, SNU CS PhD student — *NAVER AI Lab*
Co-mentoring research internship on building machine learning models with mobile UIs. Coauthored [W5]. — *Feb 2022 – Jul 2022*

Taeyoon Kim, UNIST M.S. student. — *NAVER AI Lab*
Co-mentoring on designing effective visual intervention on Youtube usage. — *Nov 2021 – Feb 2022*

Jong Ho Lee, iSchool PhD student. — *University of Maryland*
Collaborated on developing mobile activity reporting app for older adults and stroke patients. — *Sep 2021 – Nov 2021*

Lining Wang, iSchool PhD student. — *University of Maryland*
Collaborated on analyzing older adults' verbal activity reports and on-body sensor data from the Machine Learning perspective. — *Aug 2021 – Nov 2021*

Sabahat Fatima, CS Undergraduate. Currently a research engineer at the Johns Hopkins University — *University of Maryland*
Collaborated on analyzing older adults' verbal activity reports and on-body sensor data from the Machine Learning perspective. — *Apr 2021 – Nov 2021*

Diana Chou, CS M.S. student. — *University of Maryland*
Collaborated on designing and developing a mobile application for teachable interface for personalized activity recognition of older adults and stroke patients. Coauthored [C7]. — *Feb 2021 – Sep 2021*

Yuhan Luo, iSchool PhD student. Currently Assistant Professor at CityU Hong Kong. — *University of Maryland*
Collaborated on understanding the effects of speech inputs on capturing everyday food practice compared to text typing. Coauthored [C6] [J3]. — *Mar 2020 - Nov 2020*

GuHyun Han, CSE PhD student. — *Seoul National University*
Collaborated on designing and evaluating a customizable ambient visualization system for smartphone notifications. Coauthored [C8]. — *Feb 2019 - Jul 2019*

Youngtaek Kim, CSE PhD student. Currently at Samsung Electronics. — *Seoul National University*
Collaborated on designing a source code repository visualization framework, supported by Samsung electronics. Coauthored [J2] [C4]. — *Mar 2017 - Jul 2019*

Sung-In Kim, College of Medicine undergraduate. Currently a public health physician. — *Seoul National University*
Advised an independent study on how customizable self-tracking app could support habit formation of autistic adolescents. Coauthored [C3] [D7]. — *Dec 2017 - Feb 2019*

Valérie Erb, CS undergraduate at University of Zurich. Currently a MS student at KAIST CT. — *Seoul National University*
Advised an internship project on contributing to implementation of OmniTrack for Research, a mobile-based in-situ data collection platform. — *Feb 2018 - Jun 2018*

Junhoe Kim, CSE undergraduate. Currently at NCSoft Korea. *Seoul National University*
Advised an internship project on contributing to implementation of OmniTrack [J1]. *Feb 2018 - Jul 2018*

Talks & Panels

Designing LLM-driven Conversational AIs for Marginalized Populations *Seoul National University*
Invited Talk at AI/Computing Frontier Seminar *Jan 2025*

Designing Inclusive AI for Marginalized Populations *NAVER*
12th NULI Webinar *Dec 2024*

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*
Department Talk (Graduate School of AI) *Nov 2024*

Designing LLM-driven Personal Informatics Systems for Marginalized Populations *Korean Society of Design and Science Fall Intl. Conference*
Panel Talk at Special Session for 'Design for Healthcare' *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 Language Models *Seoul National University*
Department Talk (Computer Science) *Dec 2023*

HCI Research & Career Paths *KAIST*
Panel Talk at the Introduction to HCI class (Instructor: Juho Kim) *Jun 2023*

Case Study of CLOVA CareCall: Benefits and Challenges of Deploying Conversational AI Leveraging Large Language Models for Public Health Intervention *KAIST*
Invited Talk at @TABLE seminar of Aging & Technology Policy Lab (Grad school of science and technology policy) *May 2023*

Advancing Self-Tracking through Flexible Human-Data Interaction and AI *Soongsil University*
Department Talk (Computer Science) *Mar 2023*

How to Become a World-Leading HCI Researcher in Korea *HCI Korea 2023*
Panel Talk (with Prof. Jaeyeon Lee, Uran Oh, Auk Kim, Yoonji Kim, and Seongjae Oh) *Feb 2023*

Advancing Self-Tracking through Flexible Human-Data Interaction and AI — *Soongsil University*
Department Talk (Computer Science) — *Dec 2022*

Advancing Self-Tracking through Flexible Human-Data Interaction and AI — *SEOULTECH*
Invited Talk at AI Colloquium (Dept. of Applied Artificial Intelligence) — *Dec 2022*

Collecting, Visualizing, and Telling about Personal Data — *KAIST*
Invited Talk at Smart Health class (School of Computing) — *Nov 2022*

When Design Meets Engineering: HCI, Information Visualization, and Multimodal Interaction — *Sangmyung University*
Department Talk (Visual Communication Design) — *Oct 2022*

Advancing Self-Tracking through Flexible Human-Data Interaction — *UNIST*
Department Talk (Design) — *Apr 2022*

Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction — *Online*
Distinguished Research Seminar at HCI Korea 2022 — *Feb 2022*

Advancing Self-Tracking through Flexible Human-Data Interaction — *University of Seoul*
Invited Talk, hosted by Dr. Hyunggu Jung (Dept. of Computer Science & Engineering) — *Dec 2021*

Advancing Self-Tracking through Flexible Human-Data Interaction — *KAIST*
Department Talk (Industrial Design) — *Oct 2021*

Advancing Personal Tracking through Flexible Human-Data Interaction — *EIRIC*
EIRIC CHI 2021 Review Seminar — *Jun 2021*

Advancing Self-Tracking through Flexible Human-Data Interaction — *NAVER AI Lab*
AI Research Talk — *Jun 2021*

Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction — *Human-Computer Interaction Lab, University of Maryland*
HCIL Symposium 2021 — *May 2021*

Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction — *Social Data Science Center University of Maryland*
SoDa Research Roundtables — *Apr 2021*

Advancing Self-Tracking through Flexible Human-Data Interaction — *Stevens Institute of Technology*
Department Talk (Computer Science) — *Mar 2021*

Visible Language Meets Engineering Language: Designing Interactive Information Visualization Systems to Nudge People — *Korea Institute of Design Promotion*
'Dessert Seminar' (BBL) — *Apr 2019*

HCI, Personal Informatics, and Information Visualization: Being (Surviving as) an HCI Researcher in Engineering Fields without Losing Designer's Soul — *Seoul National University*
Guest Lecture in Design Research Class (Dept. of Design), hosted by Mingu Lee — *Mar 2019*

Designing Flexible Self-Tracking Technologies to Enhance *In Situ* Data Collection *Hanyang University*
Invited Talk, hosted by Dr. Gwang Uk Kim (Dept. of Computer Science) *Mar 2019*

Understanding Personal Productivity: How Knowledge Workers Define, Evaluate, and Reflect on Productivity *Seoul National University*
The 4th SNU HCI Group Summit *Aug 2018*

Designing the HCI Technology for Flexible, Semi-Automated Personal Tracking Experience *Seoul National University*
Invited Talk, hosted by Dr. Hwajung Hong (Dept. of Communication) *Apr 2018*

Designing the HCI Technology for Flexible, Semi-Automated Personal Tracking Experience *NAVER Corp., Korea*
Invited Speaker at NAVER Tech Talk *Mar 2018*

A Flexible Self-Tracking Approach Leveraging Semi-Automated Tracking *Seoul National University*
The 3rd SNU HCI Group Summit *Aug 2017*

Leveraging Framing Effects to Enhance Personal Productivity *Seoul National University*
The 2nd SNU HCI Group Summit *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
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