

Bogoan Kim, Ph.D.

RESEARCH INTEREST	My research lies at the intersection of human-computer interaction, digital healthcare, and social computing, with a focus on user-centered AI software. I design and develop data-driven systems that support holistic well-being, drawing on diverse problem-definition approaches, including stakeholder engagement, evidence synthesis (scoping and systematic reviews), and protocol-driven analysis in digital transformation contexts. These systems are designed to capture meaningful behavioral data in real-world environments, informing the development of AI models or the integration of AI as supportive features. Across projects, I emphasize the interplay between technological and social systems, translating these insights into intelligent, personalized, and scalable software solutions.	
EDUCATION	Hanyang University , Seoul, Korea	Feb 2025
	<ul style="list-style-type: none">• <i>Ph.D. in Artificial Intelligence</i><ul style="list-style-type: none">– Dissertation: BalancePath: AI-VR Framework for Personalized Adaptive System– Advisor: Prof. Kyungsik Han	
	University of Minnesota – Twin Cities , MN, USA	Jan 2017
	<ul style="list-style-type: none">• <i>B.S. in Statistics</i><ul style="list-style-type: none">– Thesis: Moderate-to-Vigorous Physical Activity and BP in Hypertensive Adults– Advisor: Prof. Barbara Kuzmak	
POSITIONS	KAIST , Dajeon, Korea	May 2025 – Present
	<ul style="list-style-type: none">• <i>Postdoctoral Researcher, College of Engineering</i><ul style="list-style-type: none">– Advisors: Profs. Hwajung Hong and Uichin Lee	
	Hanyang University , Seoul, Korea	Mar 2025 – Apr 2025
	<ul style="list-style-type: none">• <i>Postdoctoral Researcher, Department of Artificial Intelligence</i><ul style="list-style-type: none">– Advisor: Prof. Kyungsik Han	
	The Pennsylvania State University , PA, USA	Jan 2020 – Jun 2020
	<ul style="list-style-type: none">• <i>Visiting Scholar, College of IST</i><ul style="list-style-type: none">– Advisors: Profs. Dongwon Lee and Aiping Xiong	
	Indiana University , IN, USA	Jun 2019 – Sep 2019
	<ul style="list-style-type: none">• <i>Visiting Scholar, Luddy School of Informatics</i><ul style="list-style-type: none">– Advisors: Profs. Patrick C. Shih and Georgia C. Frey	
AWARDS & HONORS	Jang Young Sil Postdoctoral Fellowship	2025
	Hanyang Univ. Postdoctoral Research Fellowship	2025
	NRF of Korea Ph.D. Fellowship	2023
	<ul style="list-style-type: none">• Granted 40M KRW (equivalent to 35,000 USD) stipend for 2-year Ph.D. studies• Proposal title: AI+VR-based QoLT Systems for Social Independence of Autistic Individuals	
	UIST 2023 Travel Grant	2023
	Gary Marsden Travel Award for CHI 2023	2023
	SK Creative Challenge Finalist	2022
	IITP Best Global Research Team Award	2021
	IITP High-Potential Individuals Global Training Fellowship	2020
	Indiana University Global Talent Attraction Program (GTAP) Fellowship	2019
	Honors on the Dean’s List	2011, 2012, 2015
	Global Excellence Scholarship (merit-based; 4,210 USD)	2011
	Special Recognitions for Outstanding Reviews <ul style="list-style-type: none">• CHI 2024, CHI 2025	
	Domestic Conference Awards <ul style="list-style-type: none">• Best Paper Awards: KDMS (2024: Grand Paper, Best Paper)• Best Presentation Award: KIISE KCC (2024)	

- [c.8] “I Don’t Know Why I Should Use This App”: Holistic Analysis on Engagement Challenges in Mental Health
★ {Seungwan Jin*, Bogoan Kim*}, and Kyungsik Han
CHI 2025 (*ACM CHI Conference on Human Factors in Computing Systems*)
- [c.7] Narrating Routines through Game Dynamics: Impact of a Routine Management App for Autistic Individuals
★ Bogoan Kim, Dayoung Jeong, Hwajung Hong, and Kyungsik Han
CHI 2024 (*ACM CHI Conference on Human Factors in Computing Systems*)
- [c.6] V-DAT: Supporting Self-Awareness for Autistic People from Multimodal VR Sensor Data
★ Bogoan Kim, Dayoung Jeong, Jennifer G Kim, Hwajung Hong, and Kyungsik Han
UIST 2023 (*ACM Symposium on User Interface Software and Technology*)
- [c.5] Supporting Independence of Autistic Adults through Mobile and Virtual Reality Technologies
★ Bogoan Kim (Doctoral Symposium)
UIST 2023 (*ACM Symposium on User Interface Software and Technology*)
- [c.4] RoutineAid: Externalizing Key Design Elements to Support Daily Routines of Individuals with Autism
★ Bogoan Kim, Sung-In Kim, Sangwon Park, Hee Jeong Yoo, Hwajung Hong, and Kyungsik Han
CHI 2023 (*ACM CHI Conference on Human Factors in Computing Systems*)
- [c.3] VISTA: User-Centered VR Training System for Effectively Deriving Characteristics of Autistic Individuals
★ Bogoan Kim, Dayoung Jeong, Mignon Jeong, Taehyung Noh, Sung-In Kim, Taehyoung Kim, So-Youn Jang, Hee Jeong Yoo, Jennifer G Kim, Hwajung Hong, and Kyungsik Han
VRST 2022 (*The ACM Symposium on Virtual Reality Software and Technology*)
- [c.2] ChamberBreaker: Mitigating the Echo Chamber Effect through a Gamified Inoculation System
★ Y Jeon, Bogoan Kim, Aiping Xiong, Dongwon Lee, and Kyungsik Han
CSCW 2021 (*ACM Conference on Computer-Supported Cooperative Work and Social Computing*)
- [c.1] Photos Don’t Have Me, But How Do You Know Me?: Analyzing and Predicting Users on Instagram
Kyungsik Han, Yonggeol Jo, Youngseung Jeon, Bogoan Kim, Junho Song, and Sang-Wook Kim
UMAP 2018 (*ACM Conference on User Modeling, Adaptation and Personalization*)

Journal Articles (★ denotes JCR 2023 Q1 journal; * indicates equal contribution)

- [j.9] Enhancing Mindfulness-Based Cognitive Therapy in a Virtual Reality: A Prospective Interventional Study
★ {Bogoan Kim*, Dayoung Jeong*}, Yoonseon Choi, Younyoung Choi, Hyungsook Kim, and Kyungsik Han
Scientific Reports (SCIE, IF = 3.9, Published 2025.07)
- [j.8] Development of a Personalized Early Prediction Model for Cybersickness in Virtual Reality
Yoonseon Choi, Dayoung Jeong, Bogoan Kim, and Kyungsik Han
KIISE Transactions on Computing Practices (KCI, Published 2025.06)
- [j.7] Promoting Self-Efficacy of Individuals with Autism in Practicing Social Skills in the Workplace Using Virtual Reality and Physiological Sensors: A Feasibility Study
Sung-In Kim, So-Youn Jang, Taewan Kim, Bogoan Kim, Dayoung Jeong, Taehyoung Noh, Mignon Jeong, Kaely Hall, Meelim Kim, Hee Jeong Yoo, Kyungsik Han, Hwajung Hong, and Jennifer G Kim
JMIR Formative Research (SCIE, IF 2.20, Published 2024.01)
- [j.6] A Study on Mobile Game Design to Support Daily Routines of Individuals with Autism
Bogoan Kim, Sung-In Kim, Sangwon Park, Hee Jeong Yoo, Hwajung Hong, and Kyungsik Han
Journal of the HCI Society of Korea (KCI, Published 2022.05)
- [j.5] Usability Assessment of a Mobile Health Intervention for Increasing Physical Activity in Autistic Adults
Daehyoung Lee, Georgia C Frey, Aehong Min, Bogoan Kim, Donetta J Cothran, Scott Bellini, Kyungsik Han, and Patrick C Shih
Health Informatics Journal (SCIE, IF = 2.3, Published 2020.09)
- [j.4] PuzzleWalk: A Theory-Driven Iterative Design of a Mobile Game for Promoting Physical Activity in Autistic Adults
★ Bogoan Kim, Daehyoung Lee, Aehong Min, Seungwon Paik, Georgia C Frey, Scott Bellini, Kyungsik Han,

and Patrick C Shih

PLoS ONE (SCIE, IF = 2.9, Published 2020.09)

- [j.3] No More One Liners: Bringing Context into Emoji Recommendations
Joon-Gyum Kim, Taesik Gong, Bogoan Kim, Jaeyeon Park, Woojeong Kim, Evey Huang, Kyungsik Han, Juho Kim, JeongGil Ko, and Sung-Ju Lee
ACM Transactions on Social Computing 2020
- [j.2] A Systematic Review on Fake News Research through the Lens of News Creation and Consumption: Research Efforts, Challenges, and Future Directions
★
Bogoan Kim, Aiping Xiong, Dongwon Lee, and Kyungsik Han
PLoS ONE (SCIE, IF = 2.9, Published 2020.09)
- [j.1] ATM: The Effectiveness of Self-Regulation on Time Management through a Smartphone Application
Bogoan Kim, Seok-Won Lee, Hwajung Hong, and Kyungsik Han
IEEE Access (SCIE, IF = 3.4, Published 2019.07)

PATENTS
& SOFTWARE

Granted Patent

- A Mobile System for Routine Management in Autistic Individuals
Registration Number: **KR10-2729263** Oct 2024

Filed Patents

- VR Data Analysis Tool to Support Self-Awareness for Autistic Individuals
Application Number: **KR10-2023-0116955** Aug 2023
- VR-based Interactive Social Skills Training System for Autistic Individuals
Application Number: **KR10-2023-0116954** Aug 2023
- A multimodal LLM capturing inter-modal dynamics for personalized VR sickness prediction
Application Number: **KR10-2025-0116954** Jun 2025

Registered Software

- VR-based Dashboard for Clinical Support and Patient Monitoring in Depression Care
Registration Number: **C-2024-034698** Oct 2024

TEACHING
EXPERIENCE

Instructor / Co-lecturer (Taught all courses in English)

- Computational Social Science (**Co-lecturer**) Spring 2025
- Human-Computer Interaction (**Instructor**) Fall 2024
- Human-Computer Interaction (**Instructor / Teaching Fellow**) Fall 2023
- Introduction to Software Design (**Co-lecturer**) Spring 2023
- Creative Software Design (**Co-lecturer**) Fall 2022
- Introduction to Software Design (**Co-lecturer**) Spring 2022
- Creative Software Design (**Co-lecturer**) Fall 2021
- Data Structures and Practice (**Co-lecturer**) Spring 2021
- Data Structures and Practice (**Co-lecturer**) Spring 2019

Teaching Assistant

- Algorithms Fall 2020
- Introduction to AI Programming Language Spring 2020
- AI Intensive Class Fall 2019
- The Basics of Data Analytics Fall 2018
- The Basics of Data Analytics Spring 2018

INVITED TALKS

Lab Guest Speaker Session, Dajeon, Korea

- Host: DxD Lab @ KAIST May 2025
- Topic: Software Systems for Solving Real-World Challenges

Omnibus Lecture Series on Computational Social Science, Seoul, Korea

- Host: Department of Data Science @ Hanyang University Mar 2025
- Topic: User-Centered Digital Healthcare

ACADEMIC SERVICES	Computational Social Science Colloquium , Seoul, Korea	May 2024
	• Host: Center for Computational Social Science @ Hanyang University	
	• Topic: Sociotechnical Systems for People Who Are in Need	
	Top Conference Session , Hongcheon, Korea	Jan 2024
	• Host: HCI Korea 2024	
	• Topic: Impact of a Gamified Routine Management App for Autistic Adults	
	Top Conference Session , Jeju, Korea	Jun 2023
	• Host: Korea Computer Congress (KCC) 2023	
	• Topic: Externalizing Key Design Elements to Support Daily Routines of Autistic Adults	
	IITP Global Talent Program Workshop , Seoul, Korea	Dec 2021
	• Host: Institute of Information & Communications Technology Planning & Evaluation (IITP)	
	• Topic: Explainable Fake News Detection with Deep Learning and Human Factors	
	Global Talent Attraction Program Conference , Bloomington, IN USA	Jun 2019
	• Host: Luddy School of Informatics, Computing, and Engineering @ Indiana University	
	• Topic: Designing a Mobile Game to Promote Physical Activity in Autistic Adults	
	Global Challenge Program Symposium , Tokyo, Japan	Jun 2018
	• Host: Environment and Information Studies @ Keio University	
	• Topic: Effectiveness of a Smartphone App in Self-Regulating Time Management	
	Conference Reviewer	
	• The Conference on Human Factors in Computing Systems (CHI)	2019 - 2025
	• The Conference on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)	2019 - 2025
	• The Designing Interactive Systems Conference (DIS)	2025
	• The Conference on Computer-Supported Cooperative Work & Social Computing (CSCW)	2019 - 2024
	• The Conference on Information and Knowledge Management (CIKM)	2021 - 2023
	• The Symposium on Applied Computing (SAC)	2022
	Journal Reviewer	
	• JMIR Formative Research	2025
	• The Nature Scientific Reports	2024
	• The Taylor and Francis Interactive Learning Environments	2023
	Student Volunteer	
	• The Conference on Mobile Systems, Applications, and Services (MobiSys)	2019