

Bogoan Kim, Ph.D.

CONTACT INFORMATION	Building E8-10, Room 302 Chungdae-ro 1, Seowon-gu, Cheongju-si, Chungcheongbuk-do, 28644, Korea	Email: bogoan@kaist.ac.kr Homepage: https://bogoankim.github.io/
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 • <i>Ph.D. in Artificial Intelligence</i> – Dissertation: BalancePath: AI-VR Framework for Personalized Adaptive System – Advisor: Prof. Kyungsik Han	Mar 2018 – Feb 2025
	University of Minnesota – Twin Cities , MN, USA • <i>B.S. in Statistics</i> – Thesis: Moderate-to-Vigorous Physical Activity and BP in Hypertensive Adults – Advisor: Prof. Barbara Kuzmak	Sep 2011 – Jan 2017
POSITIONS	Chungbuk National University , Cheongju, Korea • <i>Incoming Assistant Professor, School of Information and Communication Engineering</i>	Sep 2025 – Present
	KAIST , Dajeon, Korea • <i>Postdoctoral Researcher, College of Engineering</i> – Topic: LLM-Based Personalized Discomfort Prediction Model Using Multimodal Data – Advisors: Profs. Hwajung Hong and Uichin Lee	May 2025 – Aug 2025
	Hanyang University , Seoul, Korea • <i>Postdoctoral Researcher, Department of Artificial Intelligence</i> – Topic: Clinically-Grounded Digital Transformation Framework – Advisor: Prof. Kyungsik Han	Mar 2025 – Apr 2025
	The Pennsylvania State University , PA, USA • <i>Visiting Scholar, College of IST</i> – Topic: Human Factors in Fake News Detection and Echo Chamber Mitigation – Advisors: Profs. Dongwon Lee and Aiping Xiong	Jan 2020 – Jun 2020
	Indiana University , IN, USA • <i>Visiting Scholar, Luddy School of Informatics</i> – Topic: RCT on Mobile Game to Promote Physical Activity in Autistic Adults – Advisors: Profs. Patrick C. Shih and Georgia C. Frey	Jun 2019 – Sep 2019
	The 3rd Korea Army Headquarters • <i>Honorable Discharge</i>	Aug 2012 - May 2014
AWARDS & HONORS	Jang Young Sil Postdoctoral Fellowship	2025
	Hanyang Univ. Postdoctoral Research Fellowship	2025
	NRF of Korea Ph.D. Fellowship • 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	2023

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
• Support for research @ Pennsylvania State University	
Indiana University Global Talent Attraction Program (GTAP) Fellowship	2019
• Support for research @ Indiana University	
Yoonmin Foundation Good Starter Finalist	2018
• 3rd generation, Biz section (12 out of 349 teams)	
Honors on the Dean's List	2011, 2012, 2015
Global Excellence Scholarship (merit-based; 4,210 USD)	2011
Special Recognitions for Outstanding Reviews	
• CHI 2024, CHI 2025	
Domestic Conference Awards	
• Best Paper Awards: KDMS (2024: Grand Paper, Best Paper)	
• Best Presentation Award: KIISE KCC (2024)	

PUBLICATIONS

Conference Proceedings (★ denotes [NRF-recognized top-tier CS conferences](#); * indicates equal contribution)

- [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.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, Mingon 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 Oct 2024
Registration Number: **KR10-2729263**

Filed Patents

- VR Data Analysis Tool to Support Self-Awareness for Autistic Individuals Aug 2023
Application Number: **KR10-2023-0116955**
- VR-based Interactive Social Skills Training System for Autistic Individuals Aug 2023
Application Number: **KR10-2023-0116954**
- A Multimodal LLM Capturing Inter-modal Dynamics for Personalized VR Sickness Prediction Jun 2025
Application Number: **KR10-2025-0100532**

Registered Software

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

TEACHING EXPERIENCE

Faculty Instructor

- Intelligent System (5108115) Fall 2025
- Object-Oriented Programming (5108124) Fall 2025
- Fundamental Computer Programming (0914002) Fall 2025

Instructor / Co-lecturer

- Computational Social Science Spring 2025
- Human-Computer Interaction Fall 2024
- Human-Computer Interaction Fall 2023

	<ul style="list-style-type: none"> • Introduction to Software Design • Creative Software Design • Introduction to Software Design • Creative Software Design • Data Structures and Practice • Data Structures and Practice 	Spring 2023 Fall 2022 Spring 2022 Fall 2021 Spring 2021 Spring 2019
	Teaching Assistant	
	<ul style="list-style-type: none"> • Algorithms • Introduction to AI Programming Language • AI Intensive Class • The Basics of Data Analytics • The Basics of Data Analytics 	Fall 2020 Spring 2020 Fall 2019 Fall 2018 Spring 2018
INVITED TALKS	Europe-Korea Conference 2025 Seminar , Seoul, Korea <ul style="list-style-type: none"> • Host: College of Electrical & Computer Engineering @ Chungbuk National University • Topic: The Role of HCI Researchers in the Development of Digital Therapeutics 	Aug 2025
	Lab Guest Speaker Session , Dajeon, Korea <ul style="list-style-type: none"> • Host: DxD Lab @ KAIST • Topic: Software Systems for Solving Real-World Challenges 	May 2025
	Omnibus Lecture Series on Computational Social Science , Seoul, Korea <ul style="list-style-type: none"> • Host: Department of Data Science @ Hanyang University • Topic: User-Centered Digital Healthcare 	Mar 2025
	Computational Social Science Colloquium , Seoul, Korea <ul style="list-style-type: none"> • Host: Center for Computational Social Science @ Hanyang University • Topic: Sociotechnical Systems for People Who Are in Need 	May 2024
	Top Conference Session , Hongcheon, Korea <ul style="list-style-type: none"> • Host: HCI Korea 2024 • Topic: Impact of a Gamified Routine Management App for Autistic Adults 	Jan 2024
	Top Conference Session , Jeju, Korea <ul style="list-style-type: none"> • Host: Korea Computer Congress (KCC) 2023 • Topic: Externalizing Key Design Elements to Support Daily Routines of Autistic Adults 	Jun 2023
	IITP Global Talent Program Workshop , Seoul, Korea <ul style="list-style-type: none"> • Host: Institute of Information & Communications Technology Planning & Evaluation (IITP) • Topic: Explainable Fake News Detection with Deep Learning and Human Factors 	Dec 2021
	Global Talent Attraction Program Conference , Bloomington, IN USA <ul style="list-style-type: none"> • Host: Luddy School of Informatics, Computing, and Engineering @ Indiana University • Topic: Designing a Mobile Game to Promote Physical Activity in Autistic Adults 	Jun 2019
	Global Challenge Program Symposium , Tokyo, Japan <ul style="list-style-type: none"> • Host: Environment and Information Studies @ Keio University • Topic: Effectiveness of a Smartphone App in Self-Regulating Time Management 	Jun 2018
ACADEMIC SERVICES	Program Committee Member <ul style="list-style-type: none"> • The Symposium on Applied Computing (SAC) 	2025
	Conference Reviewer <ul style="list-style-type: none"> • The Conference on Human Factors in Computing Systems (CHI) • The Conference on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) • The Designing Interactive Systems Conference (DIS) • The Conference on Computer-Supported Cooperative Work & Social Computing (CSCW) • The Conference on Information and Knowledge Management (CIKM) • The Symposium on Applied Computing (SAC) 	2019 - 2025 2019 - 2025 2025 2019 - 2024 2021 - 2023 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

**ACADEMIC
MENTORSHIP****Mentored Students**

- Hyunseung Lim, KAIST (Ph.D. Student) Spring 2025 - Present
- Sung-In Kim, Seoul National University (MD, Ph.D. Student) Spring 2025 - Present
- Joonyoung Park, KAIST (Master's Student) Spring 2025 - Present
- Jiazhou Wu, KAIST (Ph.D. Student) Spring 2025 - Present
- Myungjin Kim, Hanyang University (Ph.D. Student) Spring 2024 - Present
- Yoonseon Choi, Hanyang University (Master's Student) Fall 2023 - Present
- Dayoung Jeong, Hanyang University (Ph.D. Student) Fall 2022 - Present

**PRESS
& INTERVIEWS****Research Media Coverage**

- 한양대 환경식 교수팀 "정신건강관리 앱 지속사용 한계..." May 2025
- KAIST 등, 자폐스펙트럼장애 직장 적응 돕는 VR 개발 Jan 2023
- New game can help users identify, avoid online echo chambers Oct 2021

Other Experience

- 미네소타대 한국인 유학생들의 별난 ‘독도 사랑’ May 2016

REFERENCES

Hwajung Hong, *Professor* (Postdoc. Advisor) hwajung@kaist.ac.kr
Department of Industrial Design, KAIST

Uichin Lee, *Endowed Chair Professor* (Postdoc. Advisor) ucllee@kaist.ac.kr
School of Computing, KAIST

Kyungsik Han, *Associate Professor* (Ph.D. Advisor) kyungsikhan@hanyang.ac.kr
Department of Data Science, Hanyang University

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School of Interactive Computing, Georgia Institute of Technology

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School of Public Health, Indiana University – Bloomington

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Daehyoung Lee, *Assistant Professor* (Collaborator) dhlee@udel.edu
Department of Health Behavior and Nutrition Sciences, University of Delaware