

**Bogoan Kim, Ph.D.**

CONTACT INFORMATION	Building E8-10, Room 302 Chungdae-ro 1, Seowon-gu, Cheongju-si, Chungcheongbuk-do, 28644, Korea	Email: <a href="mailto:bogoan@cbnu.ac.kr">bogoan@cbnu.ac.kr</a> Homepage: <a href="https://bogoankim.github.io/">https://bogoankim.github.io/</a>
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	<b>Hanyang University</b> , 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
	<b>University of Minnesota – Twin Cities</b> , 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	<b>Chungbuk National University</b> , Cheongju, Korea • <i>Incoming Assistant Professor, School of Information and Communication Engineering</i>	Sep 2025 – Present
	<b>KAIST</b> , 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
	<b>Hanyang University</b> , Seoul, Korea • <i>Postdoctoral Researcher, Department of Artificial Intelligence</i> – Topic: Clinically-Grounded Digital Transformation Framework – Advisor: Prof. Kyungsik Han	Mar 2025 – Apr 2025
	<b>The Pennsylvania State University</b> , 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
	<b>Indiana University</b> , 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
	<b>The 3rd Korea Army Headquarters</b> • <i>Honorable Discharge</i>	Aug 2012 - May 2014
AWARDS & HONORS	<b>Jang Young Sil Postdoctoral Fellowship</b> <b>Hanyang Univ. Postdoctoral Research Fellowship</b> <b>NRF of Korea Ph.D. Fellowship</b>	2025 2025 2023
	• Granted 40M KRW (equivalent to 35,000 USD) stipend for 2-year Ph.D. studies • Proposal title: AI+VR-based OoLT Systems for Social Independence of Autistic Individuals	

<b>UIST 2023 Travel Grant</b>	2023
<b>Gary Marsden Travel Award</b> for CHI 2023	2023
<b>SK Creative Challenge Finalist</b>	2022
<b>IITP Best Global Research Team Award</b>	2021
<b>IITP High-Potential Individuals Global Training Fellowship</b>	2020
• Support for research @ Pennsylvania State University	
<b>Indiana University Global Talent Attraction Program (GTAP) Fellowship</b>	2019
• Support for research @ Indiana University	
<b>Yoonmin Foundation Good Starter Finalist</b>	2018
• 3rd generation, Biz section (12 out of 349 teams)	
<b>Honors on the Dean's List</b>	2011, 2012, 2015
<b>Global Excellence Scholarship</b> (merit-based; 4,210 USD)	2011
<b>Special Recognitions for Outstanding Reviews</b>	
• CHI 2024, CHI 2025	
<b>Domestic Conference Awards</b>	
• 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.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 2025.09)

- [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  
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: **KR10-2025-0100532** 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

##### Faculty Instructor

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

	<b>Instructor / Co-lecturer</b>	
	• Computational Social Science	Spring 2025
	• Human-Computer Interaction	Fall 2024
	• Human-Computer Interaction	Fall 2023
	• Introduction to Software Design	Spring 2023
	• Creative Software Design	Fall 2022
	• Introduction to Software Design	Spring 2022
	• Creative Software Design	Fall 2021
	• Data Structures and Practice	Spring 2021
	• Data Structures and Practice	Spring 2019
	<b>Teaching Assistant</b>	
	• 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
	<b>INVITED TALKS</b>	
	<b>Lab Guest Speaker Session</b> , Seoul, Korea	Aug 2025
	• Host: DMAIS Lab @ Chung-Ang University	
	• Topic: Designing Sociotechnical Systems for People in Need	
	<b>Europe-Korea Conference 2025 Seminar</b> , Seoul, Korea	Aug 2025
	• Host: College of Electrical & Computer Engineering @ Chungbuk National University	
	• Topic: The Role of HCI Researchers in the Development of Digital Therapeutics	
	<b>Lab Guest Speaker Session</b> , Dajeon, Korea	May 2025
	• Host: DxD Lab @ KAIST	
	• Topic: Software Systems for Solving Real-World Challenges	
	<b>Omnibus Lecture Series on Computational Social Science</b> , Seoul, Korea	Mar 2025
	• Host: Department of Data Science @ Hanyang University	
	• Topic: User-Centered Digital Healthcare	
	<b>Computational Social Science Colloquium</b> , Seoul, Korea	May 2024
	• Host: Center for Computational Social Science @ Hanyang University	
	• Topic: Sociotechnical Systems for People Who Are in Need	
	<b>Top Conference Session</b> , Hongcheon, Korea	Jan 2024
	• Host: HCI Korea 2024	
	• Topic: Impact of a Gamified Routine Management App for Autistic Adults	
	<b>Top Conference Session</b> , Jeju, Korea	Jun 2023
	• Host: Korea Computer Congress (KCC) 2023	
	• Topic: Externalizing Key Design Elements to Support Daily Routines of Autistic Adults	
	<b>IITP Global Talent Program Workshop</b> , Seoul, Korea	Dec 2021
	• Host: Institute of Information & Communications Technology Planning & Evaluation (IITP)	
	• Topic: Explainable Fake News Detection with Deep Learning and Human Factors	
	<b>Global Talent Attraction Program Conference</b> , 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	
	<b>Global Challenge Program Symposium</b> , Tokyo, Japan	Jun 2018
	• Host: Environment and Information Studies @ Keio University	
	• Topic: Effectiveness of a Smartphone App in Self-Regulating Time Management	
ACADEMIC SERVICES	<b>Program Committee Member</b>	
	• The Symposium on Applied Computing (SAC)	2025
	<b>Conference Reviewer</b>	
	• 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

#### 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 한경식 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*

**Jennifer G. Kim**, *Assistant Professor* (Collaborator) jennifer.kim@cc.gatech.edu  
*School of Interactive Computing, Georgia Institute of Technology*

**Dongwon Lee**, *Professor* (Collaborator) dongwon@psu.edu  
*College of IST, The Pennsylvania State University – University Park*

**Patrick C. Shih**, *Associate Professor* (Collaborator) patshih@indiana.edu  
*Luddy School of Informatics, Indiana University – Bloomington*

**Georgia C. Frey**, *Associate Professor* (Collaborator) gfrey@indiana.edu  
*School of Public Health, Indiana University – Bloomington*

**Aiping Xiong**, *Associate Professor* (Collaborator) axx29@psu.edu  
*College of IST, The Pennsylvania State University – University Park*

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