

# Bogoan Kim, Ph.D.

CONTACT INFORMATION	Building E8-10, Room 302 Chungdae-ro 1, Seowon-gu, Cheongju-si, Chungcheongbuk-do, 28644, Korea	Email: bogoan@cbnu.ac.kr 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>	2025
	<b>Hanyang Univ. Postdoctoral Research Fellowship</b>	2025
	<b>NRF of Korea Ph.D. Fellowship</b> • 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

<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.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

##### Instructor / Co-lecturer

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

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

**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*

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*Department of Health Behavior and Nutrition Sciences, University of Delaware*