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: https://bogoankim.github.io/

Tel: +82 - 43 - 261 - 2483

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

Mar 2018 - Feb 2025

- Ph.D. in Artificial Intelligence
- Dissertation: BalancePath: AI-VR Framework for Personalized Adaptive System
- Advisor: Prof. Kyungsik Han

University of Minnesota - Twin Cities, MN, USA

Sep 2011 – Jan 2017

- B.S. in Statistics
- Thesis: Moderate-to-Vigorous Physical Activity and BP in Hypertensive Adults
- Advisor: Prof. Barbara Kuzmak

POSITIONS

Chungbuk National University, Cheongju, Korea

Sep 2025 – Present

• Incoming Assistant Professor, School of Information and Communication Engineering

KAIST, Dajeon, Korea

May 2025 - Aug 2025

- Postdoctoral Researcher, College of Engineering
 - Topic: LLM-Based Personalized Discomfort Prediction Model Using Multimodal Data
 - Advisors: Profs. Hwajung Hong and Uichin Lee

Hanyang University, Seoul, Korea

Mar 2025 – Apr 2025

- Postdoctoral Researcher, Department of Artificial Intelligence
 - Topic: Clinically-Grounded Digital Transformation Framework
 - Advisor: Prof. Kyungsik Han

The Pennsylvania State University, PA, USA

Jan 2020 – Jun 2020

- Visiting Scholar, College of IST
- Topic: Human Factors in Fake News Detection and Echo Chamber Mitigation
- Advisors: Profs. Dongwon Lee and Aiping Xiong

Indiana University, IN, USA

Jun 2019 – Sep 2019

- Visiting Scholar, Luddy School of Informatics
 - Topic: RCT on Mobile Game to Promote Physical Activity in Autistic Adults
 - Advisors: Profs. Patrick C. Shih and Georgia C. Frey

The 3rd Korea Army Headquarters

Aug 2012 - May 2014

• Honorable Discharge

AWARDS & HONORS

Jang Young Sil Postdoctoral Fellowship

2025

Hanyang Univ. Postdoctoral Research Fellowship

2025

NRF of Korea Ph.D. Fellowship

2023

- 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
Support for research @ Pennsylvania State University	
Indiana University Global Talent Attraction Program (GTAP) Fellowship • Support for research @ Indiana University	2019
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 Descentions for Outstanding Devices	

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, Mingon 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)

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- [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 he 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: Re-
- * search 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

Jun 2025

Application Number: KR10-2025-0100532

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) • Object-Oriented Programming (5108124) Fall 2025 Fall 2025

• Fundamental Computer Programming (0914002) Fall 2025

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	Instructor / Co-lecturer	
	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
	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, Seoul, Korea	Aug 2025
INVITED TALKS	Host: DMAIS Lab @ Chung-Ang University	Aug 2023
	Took: Dividis Lab & Chang-Ang University Topic: Designing Sociotechnical Systems for People in Need	
		. 2025
	Europe-Korea Conference 2025 Seminar, Seoul, Korea	Aug 2025
	Host: College of Electrical & Computer Engineering @ Chungbuk National University The Polynography of the Polynography o	
	• Topic: The Role of HCI Researchers in the Development of Digital Therapeutics	
	Lab Guest Speaker Session, Dajeon, Korea	May 2025
	Host: DxD Lab @ KAIST The index of the control of the contro	
	 Topic: Software Systems for Solving Real-World Challenges 	
	Omnibus Lecture Series on Computational Social Science, Seoul, Korea	Mar 2025
	Host: Department of Data Science @ Hanyang University	
	Topic: User-Centered Digital Healthcare	
	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)	200 2021
	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	3411 2019
	• Topic: Designing a Mobile Game to Promote Physical Activity in Autistic Adults	
		Inn 2019
	Global Challenge Program Symposium, Tokyo, JapanHost: Environment and Information Studies @ Keio University	Jun 2018
	 Flost: Environment and information Studies & Reio University Topic: Effectiveness of a Smartphone App in Self-Regulating Time Management 	
ACADEMIC	Program Committee Member	
SERVICES	• The Symposium on Applied Computing (SAC)	2025
	Conference Reviewer	
	• The Conference on Human Factors in Computing Systems (CHI)	2019 - 2025

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	 The Conference on Interactive, Mobile, Wearable and Ubiquitous Technologie The Designing Interactive Systems Conference (DIS) 	2025
	 The Conference on Computer-Supported Cooperative Work & Social Comput The Conference on Information and Knowledge Management (CIKM) The Symposium on Applied Computing (SAC) 	ting (CSCW) 2019 - 2024 2021 - 2023 2022
	Journal Reviewer	2025
	 JMIR Formative Research The Nature Scientific Reports	2025 2024
	The Taylor and Francis Interactive Learning Environments	2023
	Student Volunteer • The Conference on Mobile Systems, Applications, and Services (MobiSys)	2019
ACADEMIC	Mentored Students	
MENTORSHIP	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	Research Media Coverage	
& Interviews	• 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) School of Computing, KAIST	uclee@kaist.ac.kr
	Kyungsik Han, Associate Professor (Ph.D. Advisor)	kyungsikhan@hanyang.ac.kr
	Department of Data Science, Hanyang University	
	Jennifer G. Kim, Assistant Professor (Collaborator) School of Interactive Computing, Georgia Institute of Technology	jennifer.kim@cc.gatech.edu
	Dongwon Lee , <i>Professor</i> (Collaborator) <i>College of IST</i> , The Pennsylvania State University – University Park	dongwon@psu.edu
	Patrick C. Shih, Associate Professor (Collaborator) Luddy School of Informatics, Indiana University – Bloomington	patshih@indiana.edu
	Georgia C. Frey , <i>Associate Professor</i> (Collaborator) <i>School of Public Health</i> , Indiana University – Bloomington	gfrey@indiana.edu
	Aiping Xiong, Associate Professor (Collaborator) College of IST, The Pennsylvania State University – University Park	axx29@psu.edu

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Department of Health Behavior and Nutrition Sciences, University of Delaware

dhlee@udel.edu

Daehyoung Lee, Assistant Professor (Collaborator)