

## WORK EXPERIENCE

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**Post-doctoral Research Fellow, Aug 2025 - Present, JDL, AI DIVISION / Korea Advanced Institution of Science & Technology**

**Serving R&D Director in a KAIST-affiliated Startup, ROSAIC in parallel**

Leading/contributing to diverse research projects of AX in manufacturing

- Designing proactive AI agents in manufacturing context via mixing to MES
- Physical AI project: 3DP-based on-site adaptive robot parts

**Visiting Researcher, May 2024 - June 2025, Syteraction Lab, City University of HongKong / National University of Singapore**

Leading/contributing to diverse research projects of Human-AI / Computer Interaction

- Glassmail+ and IntentNavi: in-situ digital document creation on smart-glasses with wearable AI-powered agent
- Talk with AI for visual references: Seamless referential communication design for Human-AI-powered agent conversation
- Multimodal Search vs Unimodal search for effective in-situ information retrieval

**Consultant, Technology Strategy, Feb 2015 - Jun 2015, Deloitte | Seoul, Korea**

- Extracted and visualized data from a large-scale in-house customer database of the 1st department store in Korea in order to assist in consulting on future technology and business strategies (Query coding using MySQL & Information visualization using Spotfire)

**Senior Software Engineer, Jun 2012 - Jun 2014, LG Electronics, Smart TV device solution team | Seoul, Korea**

- Led key responsibilities in Home Application Management, Settings Application Customization, Application Testing, and JNI Interface Development for the world's first Android (2012) and webOS (2014) TV product development and market release

**Software Engineer, Nov 2010 - May 2012, Cowon systems, portable multimedia device solution team | Seoul, Korea**

- Conducted user studies via mixed methodologies to enhance the user experience of home applications for the world's first Android-based handheld media players (D2+/D3, 2011)
- Customized the UI/UX of the home application by translating consumer insights into product features in collaboration with cross-functional teams, including UI and product designers, as well as project managers

## SKILLS

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**Programming:** JAVA / C / C++ / C# / JavaScript / HTML / CSS / Python / JASP / Python

**Research:** Quantitative - Surveys, A/B test, Tree-testing | Qualitative- Card-sorting, Usability / Field study, Focus groups, In-depth / 1:1 user interviews, Diary (Longitudinal) study | **Statistical Analysis:** ANOVA, T-Tests, Chi-square test, Regression analysis

**Technology covering stack:** User scenario / interaction workflow / SW D&D | Tech business strategy D&D

## EDUCATION

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**Ph.D** in computer science (specialization: Human-Computer Interaction) | National University of Singapore, 2015 - 2023

**MS.c** in computer science (specialization: Human-Computer Interaction) | Korea University, 2008 - 2010

**BS.c** in computer science | Korea University, 2003 - 2007

## ACTIVITIES & ACHIEVEMENTS

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**AI Model Development Bootcamp** | Supported by Ministry of Employment and Labor, Korea | Feb 2025

**Recognitions for Outstanding Reviews** | Awarded by the ACM SIGCHI 2023 conference | Nov 2023

**Honourable Mention** | Awarded by the ACM SIGCHI 2022 conference | May 2022

**NUS Staff Travel Award** | Awarded by National University of Singapore | Sep 2020

**NUS Research Scholarship** | Awarded by Ministry of Education, Singapore | Aug 2015 - 2019

**Brain Korea 21 Research Scholarship** | Awarded by Ministry of Education, Korea | Aug 2008 - 2010

## PUBLICATION (Journal, Conference, and Poster Papers (Denoted by J, C and P, respectively))

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[j.1] **SelfIE: Self-Initiated Explorable Instructions Towards Enhanced User Experience** *Hyeongcheol Kim, Katherine Kennedy, Georgia Zhang, Chan Liu, Shengdong Zhao arXiv preprint arXiv:2407.08501, 2026 (under review in International Journal of Industrial Ergonomics)*

[j.2] **NKG2D receptor ligands are cell surface biomarkers for injured murine and human nociceptive sensory neurons** *Shuaiwei Wang, Allison M Barry, Yoon Kyung Lee, Naomi Young, Sang Wook Shim, Xinying Wang, Hyeongcheol Kim, Laura Stirling-Barros, Rafael González-Cano, Michael Costigan, Georgios Baskozos, Simon Rinaldi, David LH Bennett, Seog Bae Oh, Alexander J Davies, Journal of Neuroinflammation*

[c.4] **AiGet: Transforming Everyday Moments into Hidden Knowledge Discovery with AI Assistance on Smart Glasses** *Runze Cai, Nuwan Janaka, Hyeongcheol Kim, Yang Chen, Shengdong Zhao, Yun Huang, David Hsu SIG CHI 2025: ACM Conference on Human Factors in Computing Systems*

[c.3] **Paracentral and near-peripheral visualizations: Towards attention-maintaining secondary information presentation on OHMDs during in-person social interactions** *Nuwan Janaka, Chloe Haigh, Hyeongcheol Kim, Shan Zhang, Shengdong Zhao SIG CHI 2022: ACM Conference on Human Factors in Computing Systems (Best Paper Honorable Mention)*

[c.2] **LiveSnippets: Voice-based Live Authoring of Multimedia Articles about Experiences** *Hyeongcheol Kim, Shengdong Zhao, Chan Liu, Kotaro Hara MobileHCI 2020: International Conference on HCI with Mobile Devices and Service*

[c.1] **Designing of multimodal feedback for enhanced multitasking performance** *Hyeongcheol Kim, Gerald Jeonghyeon Kim SIG CHI 2011: ACM Conference on Human Factors in Computing Systems Posters, Demos, and Workshop Papers*

[p.1] **Ringeraction: Coordinated thumb-index interaction using a ring** *Sarthak Ghosh, Hyeongcheol Kim, Yao Cao, A. Wessels, Simon Perrault, Shengdong Zhao SIG CHI 2016: ACM Conference on Human Factors in Computing Systems*

[p.2] **"What's this?": Understanding User Interaction Behaviour with Multimodal Input Information Retrieval System** *Silang Wang, Hyeongcheol Kim, Nuwan Janaka, Kun Yue, Hoang-Long Nguyen, Shengdong Zhao, Haiming Liu, Khanh-Duy Le MobileHCI 2024: International Conference on Human-Computer Interaction with Mobile Devices and Service*