

Han-Jong Kim

Dept. of Industrial Design, KAIST
Co.design:Inter.action Design Research Lab.
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Republic of Korea

Curriculum Vitae

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Education

- Ph.D., Industrial Design**, GPA: 4.05/4.3 Mar 2015
- Feb 2019
Korea Advanced Institute of Science and Technology (KAIST)
Co.design:Inter.action Design Research Lab.
Advisor: Tek-Jin Nam
Thesis: *"Experience Prototyping for Designing Smart Environments"*
- M.S., Industrial Design**, GPA: 3.94/4.3 Mar 2013
- Feb 2015
Korea Advanced Institute of Science and Technology (KAIST)
Co.design:Inter.action Design Research Lab.
Advisor: Tek-Jin Nam
Thesis: *"Augmented Miniature-based Design Toolkit for User Experience in Interactive Space"*
- B.S., Industrial Design**, GPA: 3.67/4.3 Feb 2008
- Feb 2013
Minor in Management Science
Korea Advanced Institute of Science and Technology (KAIST)
Advisor: Tek-Jin Nam

Experience and Projects

Professional Experience

- Contents Designer** Aug 2010
- Aug 2011
Contents Lab, Creative Center
TMON Inc., Korea

Funded Research Projects

- EDISON (Development of Computer Aided Design Application and User Interface for Interactive Products and Systems)** Jul 2014
- Feb 2019
Funded by Ministry of Science, ICT, and Future Planning, Korea
Role: Software development and interface design of mechanism design software
- Developing UX Guidelines for Maker's Prototyping Platform** Apr 2017
- Jun 2018
Funded by Samsung Electronics
Role: UX research (interview, participatory design, data analysis)

Development of Printer UX Map for Educational Vertical Market

Funded by Samsung Electronics

Role: UX research (interview, participatory design, data analysis)

May 2014

- Dec 2014

UX-oriented Mobile Software Platform

Funded by Ministry of Knowledge Economy, Korea

Role: Supporting education for UX design methodology

Mar 2013

- Dec 2013

Research Interest

Human-Computer Interaction (HCI), User Interface Design, User Experience Design

Prototyping, Interaction Design, Research through Design

Augmented Reality, Mixed Reality, Design Tool Development

Smart Environment, Interactive Space, Augmented Space

Skills

UX Design & Research

Technology probe, affinity diagramming, experience prototyping, concept generation, storyboarding, focus group, cultural probe, interview, usability testing

Prototyping & Programming

Arduino, Node.js, Javascript, Processing-Java, P5.js, THREE.js, C++, Android, HTML, CSS, jQuery, WordPress, eXpressEngine

Basic Tools (Design)

Rhinoceros, SolidWorks, Autodesk Alias, Inventor, AutoCAD, 123D Apps (Design/Make/Circuits), Adobe Photoshop, Illustrator, Premiere, Flash

Publications

Journal

Kim, H-J., Jeong, Y., Kim, J-W., Nam, T-J. (2018). A Prototyping Tool for Kinetic Mechanism Design and Fabrication: Developing and Deploying M.Sketch for Science, Technology, Engineering, the Arts, and Mathematics Education. *Advances in Mechanical Engineering*. In Press.

Conference Proceedings (International)

Kim, H-J., Kim, C., Nam, T-J. (2018). SketchStudio: Experience Prototyping with 2.5-Dimensional Animated Design Scenarios. *In Proc. Conference on Designing Interactive Systems (DIS '18)*, ACM, 831-843.

Jeong, Y., **Kim, H-J.**, Nam, T-J. (2018). Mechanism Perfboard: An Augmented Reality Environment for Linkage Mechanism Design and Fabrication. *In Proc. CHI Conference on Human Factors in Computing Systems (CHI '18)*, ACM, No. 411.

Kim, H-J., Kim, J-W., Nam, T-J. (2106). miniStudio: Designers' Tool for Prototyping Ubicomp Space with Interactive Miniature. *In Proc. CHI Conference on Human Factors in Computing Systems (CHI '16)*, ACM, 213-224.

Kim, J-W., **Kim, H-J.**, Nam, T-J. 2016. M.Gesture: An Acceleration-Based Gesture Authoring System on Multiple Handheld and Wearable Devices. *In Proc. CHI Conference on Human Factors in Computing Systems (CHI '16)*, ACM, 2307-2318.

Demo, Poster & Video

Kim, H-J. (2018). Rapid Smart Environment Prototyping for Early Conceptual Design. *In Proc. Companion Publication on Designing Interactive Systems (DIS '18 Companion)*, ACM, 363-366.

Kim, H-J., Kim, C., Nam, T-J. (2018). SketchStudio: Rapid Prototyping Tool for 2.5D Animated Design Scenarios, *In Proc. Companion Publication on Designing Interactive Systems (DIS '18 Companion)*, ACM, 335-338.

Kim, H-J., Jeong, Y., Kim, J-W., Nam, T-J. (2016). M.Sketch: Prototyping Tool for Linkage-Based Mechanism Design. *In Proc. Adjunct Proceedings of the ACM Symposium on User Interface Software & Technology (UIST '16 Adjunct)*. ACM, 75-77.

Kim, H-J., Nam, T-J. (2015). Augmented Miniature Prototyping Toolkit for UX in Interactive Space. *In Proc. Extended Abstracts on Human Factors in Computing Systems (CHI '15 EA)*, ACM, 2229-2234.

Kim, H-J., Nam, T-J. (2014). Muzlog: instant music transcribing system for acoustic guitarists. *In Proc. Extended Abstracts on Human Factors in Computing Systems (CHI '14 EA)*, ACM, 451-454.

Kim, H-J., Lee, M-H., Goo, B-C., Nam, T-J. (2013). Xtempo: music polaroid for printing real-time acoustic guitar performance. *In Proc. Extended Abstracts on Human Factors in Computing Systems (CHI '13 EA)*, ACM, 2827-2828.

Conference Proceedings (Domestic, Korea)

Kim, H-J., Nam, T-J. (2018). Development and Deployment of An Experience Prototyping Tool for Interactive Scenarios. *In Proc. Korean Society of Design Science 2018 Fall (KSDS '18 Fall)*, 156-157.

Kim, C., **Kim, H-J.**, Nam, T-J. (2018). RaspberryPi-Arduino Based Development Environment for IoT Prototyping. *In Proc. Korean Society of Design Science 2018 Spring (KSDS '18 Spring)*, 80-81.

Jeong, Y., **Kim, H-J.**, Nam, T-J. (2018). A Design Tool for Generating Linkage Mechanism Based on Movement Sketch. *In Proc. Korean Society of Design Science 2018 Spring (KSDS '18 Spring)*, 92-93.

Kim, H-J., Kim, J-W., Nam, T-J. (2016). Development of Mechanism Design Software for Designing Interactive Products with Kinetic Movement. *In Proc. Korean Society of Design Science 2016 Spring (KSDS '16 Spring)*, 86-87.

Kim, H-J., Cha, S., Park, R., Nam, T-J., Lee, W., Lee, G. (2016). Mo-Bi: Contextual Mobile Interfaces through Bimanual Posture Sensing with Wrist-Worn Devices. *In Proc. Human Computer Interaction Korea (HCIK '16)*, Hanbit Media Inc., 94-99.

Kim, J-W., **Kim, H-J.**, Nam, T-J. (2015). An Interaction & Mechanism Design Workflow for Capstone Design Projects Based on a Top-Down Approach. *In Proc. Korean Society of Design Science 2015 Spring (KSDS '15 Spring)*, 184-185.

Kim, H-J., Lee, M-H., Nam, T-J. 2013. Music Polaroid for Printing Real-Time Acoustic Guitar Performance, *In Proc. Korean Society of Design Science 2013 Spring (KSDS '13 Spring)*, 134-135.

Awards

Distinguished Service Award, EDISON (EDucation-research Integration through Simulation On the Net) Project, KISTI (Korea Institute of Science and Technology Information) (2016)

Service on EDISON (educational platform of computational science & engineering) community

Best Paper Award, Human Computer Interaction Korea (HCIK '16)

Mo-Bi: Contextual Mobile Interfaces through Bimanual Posture Sensing with Wrist-Worn Devices

1st People's Choice Award, Student Innovation Contest in ACM Symposium on User Interface Software and Technology (UIST '14)

DreaMop: To Make Your Housework More Effective and Enjoyable

Grand Prix, KAIST Undergraduate Research Participation Program Award (2013)

Xtempo: Music Polaroid for Printing Real-time Acoustic Guitar Performance

Red Dot Design Award: Design Concept 2010

Lock-On: Bicycle Helmet with Lock

Book

Nam, T-J, Lee, S., Park, Y-W., Min, H., Baek, K-M., **Kim, H-J.**, UX for Mobile Software Platform, KAIST Press for Mobile Software Platform, ISBN: 978-89-89453-62-8.

Patents (Issued)

Apparatus for Print Out of Music Scores and Method Thereof (No. 10-1450054, Korea)

Multi-Functional Helmet that Locks the Bicycle and the Rack (No. 20-0461171, Korea)

Press

A KAIST Student Team Wins the ACM UIST 2014 Student Innovation Contest

Nov 2014

Covered in KAIST news and Korean newspapers

(DongAh News, Digital Times, Newsis, Money Today, etc.)

Exhibition

Tokyo Designers' Week

Oct 2012

Graduation Project Exhibition

- Nov 2012

Teaching Assistant

Interaction Prototyping, Industrial Design, KAIST	Fall, 2017
Product Design Factors, Industrial Design, KAIST	Spring, 2016
Interaction Design, Industrial Design, KAIST	Fall, 2015
CAD & 3D Modeling, Industrial Design, KAIST	Spring, 2015
Interaction Design, Industrial Design, KAIST	Fall, 2014
CAD & 3D Modeling, Industrial Design, KAIST	Spring, 2014
Interaction Design, Industrial Design, KAIST	Fall, 2013
Product Design System, Industrial Design, KAIST	Spring, 2013