BOKYUNG LEE

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EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) — Mar. 2015 – Feb 2020
MA.& Ph.D. of Engineering | *Industrial Design* — Daejeon, South Korea
- Embodied Design Toolkit for VR/AR
- Interactive Human Bodies in Design Tools

TU Delft — Sep. 2014 – Feb 2015
M.A. Exchange Program | *Department of Design Engineering* — Delft, Netherlands

Aalto University — Jan. 2012 – Aug 2012
Undergraduate Exchange Program | *School of Science* — Helsinki, Finland

Korea Advanced Institute of Science and Technology (KAIST) — Feb. 2009 – Feb 2014
Bachelor of Engineering | *Industrial Design & Technology Management* — Daejeon, South Korea

WORK EXPERIENCE

Autodesk Research | *Simulation, Optimization, and Systems Group* — Mar. 2020 – current
Industrial Postdoctoral Fellow — Toronto, Canada
- Human-centered simulation-driven design tools
- Virtual humans with agency for digital design tools
- Human-centered generative Design, Data-driven Design

Autodesk Research | *Complex Systems Group* — Nov. 2018 – Aug. 2019
Research Intern — Toronto, Canada
- Computer vision approach for human-building interactions
- Skeletonized ethnography tool

HONORS AND AWARDS

CSCW Best Paper Award — 2020
ACM Hum.-Comput. Interact. Computer Supported Cooperative Work and Social Computing.

CSCW Honorable Mention Award — 2019
ACM Hum.-Comput. Interact. Computer Supported Cooperative Work and Social Computing.

Gender Equality Pictogram Bronze Award — 2014
hosted by Choongchung City, Korea

Location-Based Service (LBS) Web & Application Contest — 2013
hosted by Korea Communication and Commissions | organized by Korea Internet & Security Agency

Innoplolis Idea Contest Grand Prize — 2013
hosted by Ministry of Knowledge Economy of Korea

PATENTS

Furniture Design Apparatus Displaying Personalized Guide Information — Jan 2018
Invention field: ICT/SW, KR-10-2018-0002957

ACADEMIC ACHIEVEMENTS

Bokyung Lee, Michael Lee, Pan Zhang, Alexander Tessier, Daniel Saakes, Azam Khan., **Socio-Spatial Comfort: Using Vision-based Analysis to Inform User-Centred Human-Building Interactions**, Proc. ACM Hum.-Comput. Interact. 4, *CSCW3*, Article 238 (December 2020), 33 pages.
<div align="right">2020</div>

Jaeho Sung, Bokyung Lee, Daniel Saakes, **PoseScape: Pose-based Analysis System for Long-term Observation Studies**, ACM *NordiCHI 2020* poster

Bokyung Lee, Michael Lee, Pan Zhang, Alexander Tessier, Azam Khan., **An Empirical Study of How Socio-Spatial Formations are influenced by Interior Elements and Displays in an Office Context.** Proc. ACM Hum.-Comput. Interact. 3, *CSCW*, Article 58.
<div align="right">2019</div>

Bokyung Lee, Michael Lee, Alexander Tessier, Azam Khan., Skeletonographer: Skeleton-based Digital Ethnography Tool, ACM *CSCW 2019* demo

Alexander Tessier, Simon Breslav, Kean Walmsley, Michael Lee, Hali Larsen, Jacky Bibliowicz, Pan Zhang, Liviu-Mihai Calin, Bokyung Lee, Josh Cameron, Rhys Goldstein, and Azam Khan., **Occupancy Visualization towards Activity Recognition**, ACM *DFSH 2019*

Bokyung Lee, Michael Lee, Alexander Tessier, Azam Khan., **Semantic Human Activity Annotation Tool Using Skeletonized Surveillance Videos**, ACM *Ubicomp 2019* demo

Bokyung Lee, Taeil Jin, Sung-Hee Lee, Daniel Saakes., **SmartManikin: Virtual Humans with Agency for Design Tools**, ACM *CHI 2019* full paper

Bokyung Lee, Sindy Wu, Maria Reyes, Daniel Saakes., **The Effect of Interruption Timings on Autonomous Height-Adjustable Desks that Responds to Task Changes**, ACM *CHI 2019* full paper

Bokyung Lee, Joongi Shin, Hyoshin Bae, Daniel Saakes., **Interactive and Situated Guidelines to Help Users Design a Personal Desk that Fits Their Bodies**, ACM *DIS 2018* full paper
<div align="right">2018</div>

Bokyung Lee, Jiwoo Hong, Jaeheung Surh, Daniel Saakes., **Ori-mandu: Korean Dumpling into Whatever Shape You Want**, ACM *DIS 2017* full paper (pictorial)
<div align="right">2017</div>

Bokyung Lee, Gyeol Han, Jundong Park, Daniel Saakes., **Consumer to Creator: How Households Buy Furniture to Inform Design and Fabrication Interfaces.**, ACM *CHI 2017* full paper

Bokyung Lee, Jiwoo Hong, Jaeheung Surh, Daniel Saakes., **Ori-mandu: Korean Dumpling into Whatever Shape You Want**, ACM *CHI 2017* video showcase

Jundong Park, Bokyung Lee, Gyeol Han, Daniel Saakes., **Two Mental Models of Non-Professional Design Process for Future Fabrication Interface.**, *HCI Korea 2017* full paper

Bokyung Lee, Minjoo Cho, Daniel Saakes., **Posing and Acting as Input for Personalizing Furniture**, ACM *NordiCHI 2016* full paper
<div align="right">2016</div>

SeungRyoel Kim, Bokyung Lee, Daniel Saakes.,**Gesture-based Trafficator to Improve Driver to Traffic Communication.**, *KSDS 2016* Fall 2016 paper

Foong-Yi Chia, Bokyung Lee, Daniel Saakes., **Collaboration in the Living Room or How Couples Design Together**, ACM *NordiCHI 2016* poster

Minjoo Cho, Bokyung Lee, Joonhee Min, Daniel Saakes., **Sketching in Virtual Reality for Rapid and Situated Idea Generation**, *KSDS 2015* Fall paper
<div align="right">2015</div>

Bokyung Lee, Froukje Sleeswijk Visser, Daniel Saakes., **Online User Reviews as a Design Resource**, *IASDR* 2015 full paper

Shin H-S (Felix), Bokyung Lee, Daniel Saakes., **TagRadar: Locating Objects Using a Smart Phone Accessory**, ACM *Ubicomp*/ISWC 2015 Demos

INVITED TALKS

HCI Korea Panel Talk: Panel for Future of Digital Fabrication	Jan 2021
Title: Not just helping you design easily, but help you design what you want.	
ID KAIST Ph.D. Colloquium Talk	Jul 2017
Doing a Ph.D. in HCI & Design Research	
Autodesk Research Talk	Nov 2018
Embodied Design Tools for Digital Fabrication	
CS374: Introduction to HCI Research Talk	Jun. 2018
Design-driven HCI Research	
HCI KAIST Research Talk	Apr 2017
Consumer to Creator: Understanding how people buy furniture to inform fabrication tools	

TEACHING EXPERIENCE

Digital Design Fabrication (teaching assistant)	Fall 2017
ID KAIST Academic Counselor	Spring 2017
Digital Design Fabrication (teaching assistant)	Fall 2016
Integrated Design – Undergraduate graduation project	Spring 2016
Digital Design Fabrication (teaching assistant)	Fall 2015
Space Design (teaching assistant)	Spring 2015
Introduction to Industrial Design (teaching assistant)	Spring 2014

PROJECT EXPERIENCE

Designing Occupant Simulation System for Digital Design Evaluation	2020-current
Vision-based Social Interaction Analysis for Human-Centered Architecture	2020-current
Design Toolkits for Everybody with VR/AR Technology	*project manager*	2015-2018
AI/AR Personal Health Recommendations for Mobile Computing at Home	*project manager*	2018
AI/AR Personal Health Recommendations for Mobile Computing at Home	*project lead*	2018
Gesture-based Trafficator to Enhance Human-Automobile Interaction	*teaching assistant*	2017
Augmented Reality Interface for the Internet of Things	*participating researcher*	2016-2018
An Interactive Tabletop to Support Surveillance Scenarios with UAVs	*participating researcher*	2015
Design for the Next Generation UX-Oriented Mobile Software Platform	*researcher*	2013

LEADERSHIP ACTIVITIES

My Design Lab Student Lead	Mar 2014 – Dec 2017
Ph.D. student representative. Industrial Design department, KAIST	Sep 2016 - Aug 2017
Student organizing lead, Design 3.0 Forum	Aug 2017
Student organizing lead, ID KAIST 30th anniversary event	Aug 2017
K2 KAIST-Kyushu University Workshop	Feb 2017

ACADEMIC SERVICE

Academic Paper Review: ACM CHI, ACM Siggraph E-tech, ACM DIS, ACM IDC	2020
Academic Paper Review: ACM CHI, ACM Siggraph Asia	2019
Academic Paper Review: ACM CHI, ACM CHI Play, ACM CSCW, ACM DIS, ACM TEI, ACM UIST	2018
Academic Paper Review: ACM DIS, ACM IDC, ACM C&C	2017

Skills

Languages: Korean (Native), English (fluent)
Programming: C#, Python (NumPy, SciPy, Matplotlib, Pandas), Python, Javascript
Tools: Unity, Adobe Illustrator, Adobe Photoshop, Adobe Premier, Adobe Indesign, Autodesk Fushion 360, Autodesk Revit, Autodesk Dynamo
Document Creation: Microsoft Office Suite, LaTex
Research Methods: design research methods (contextual inquiry, FGI, situated interview, gesture elicitation study), quantitative analysis (SPSS, R), mixed-methods