

BOKYUNG LEE

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EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) MA.& Ph.D. of Engineering <i>Industrial Design</i> <ul style="list-style-type: none">Embodied Design Toolkit for VR/ARInteractive Human Bodies in Design Tools	Mar. 2015 – Feb 2020 Daejeon, South Korea
TU Delft M.A. Exchange Program <i>Department of Design Engineering</i>	Sep. 2014 – Feb 2015 Delft, Netherlands
Aalto University Undergraduate Exchange Program <i>School of Science</i>	Jan. 2012 – Aug 2012 Helsinki, Finland
Korea Advanced Institute of Science and Technology (KAIST) Bachelor of Engineering <i>Industrial Design & Technology Management</i>	Feb. 2009 – Feb 2014 Daejeon, South Korea

WORK EXPERIENCE

Autodesk Research <i>Simulation, Optimization, and Systems Group</i> Industrial Postdoctoral Fellow <ul style="list-style-type: none">Digital-Physical Convergence Systems/UXUX for AI Virtual humans in the digital worldHuman-centered AI-driven design tools	Mar 30. 2020 – current Toronto, Canada
Autodesk Research <i>Complex Systems Group</i> Research Intern <ul style="list-style-type: none">Computer Vision-based Information Analysis Approach for Human-Building InteractionsSkeletonized ethnography tool	Nov 6. 2018 – Aug 2. 2019 Toronto, Canada

HONORS AND AWARDS

ACM Honorable Mention Award (Top 5%) ACM Designing Interactive Systems Conference	2021
ACM Best Paper Award (Top 1%) ACM Hum.-Comput. Interact. Computer Supported Cooperative Work and Social Computing.	2020
ACM Honorable Mention Award (Top 5%) ACM Hum.-Comput. Interact. Computer Supported Cooperative Work and Social Computing.	2019
Gender Equality Pictogram Bronze Award hosted by Choongchung City, Korea	2014
Location-Based Service (LBS) Web & Application Contest hosted by Korea Communication and Commissions organized by Korea Internet & Security Agency	2013
Innoplolis Idea Contest Grand Prize hosted by Ministry of Knowledge Economy of Korea	2013

PATENTS

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

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|---|------|
| Bokyung Lee, Michael Lee, Jacky Bibliowicz, Rhys Goldstein, Jeremy Mogk, Alexander Tessier, Simulation and Visualization of Virus Transmission for Architectural Design Analysis , ACM <i>SIGGRAPH</i> | 2021 |
| Bokyung Lee, Michael Lee, Jeremy Mogk, Rhys Goldstein, Jacky Bibliowicz, Frederik Brudy, Alexander Tessier, Designing a Multi-Agent Occupant Simulation System to Support Facility Planning and Analysis for COVID-19 , ACM <i>DIS</i> (Designing Interactive Systems)/ Honorable Mention Award (Top 5%) | |
| 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 , ACM Hum.-Comput. Interact. 4, CSCW3, Article 238 (December 2020), 33 pages./ Best Paper Award (Top 1%) | 2020 |
| Jaeho Sung, Bokyung Lee, Daniel Saakes, PoseScape: Pose-based Analysis System for Long-term Observation Studies , ACM <i>NordiCHI 2020</i> 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./ Honorable Mention Award (Top 5%) | 2019 |
| Bokyung Lee, Michael Lee, Alexander Tessier, Azam Khan., Skeletonographer: Skeleton-based Digital Ethnography Tool, ACM <i>CSCW 2019</i> 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 <i>DFSH 2019</i> | |
| Bokyung Lee, Michael Lee, Alexander Tessier, Azam Khan., Semantic Human Activity Annotation Tool Using Skeletonized Surveillance Videos , ACM <i>Ubicomp 2019</i> demo | |
| Bokyung Lee, Taeil Jin, Sung-Hee Lee, Daniel Saakes., SmartManikin: Virtual Humans with Agency for Design Tools , ACM <i>CHI 2019</i> 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 <i>CHI 2019</i> 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 <i>DIS 2018</i> full paper | 2018 |
| Bokyung Lee, Jiwoo Hong, Jaeheung Surh, Daniel Saakes., Ori-mandu: Korean Dumpling into Whatever Shape You Want , ACM <i>DIS 2017</i> full paper (pictorial) | 2017 |
| Bokyung Lee, Gyeol Han, Jundong Park, Daniel Saakes., Consumer to Creator: How Households Buy Furniture to Inform Design and Fabrication Interfaces. , ACM <i>CHI 2017</i> full paper | |
| Bokyung Lee, Jiwoo Hong, Jaeheung Surh, Daniel Saakes., Ori-mandu: Korean Dumpling into Whatever Shape You Want , ACM <i>CHI 2017</i> video showcase | |
| Jundong Park, Bokyung Lee, Gyeol Han, Daniel Saakes., Two Mental Models of Non-Professional Design Process for Future Fabrication Interface. , <i>HCI Korea 2017</i> full paper | |
| Bokyung Lee, Minjoo Cho, Daniel Saakes., Posing and Acting as Input for Personalizing Furniture , ACM <i>NordiCHI 2016</i> full paper | 2016 |
| SeungRyoel Kim, Bokyung Lee, Daniel Saakes., Gesture-based Trafficator to Improve Driver to Traffic Communication. , <i>KSDS 2016</i> Fall 2016 paper | |
| Foong-Yi Chia, Bokyung Lee, Daniel Saakes., Collaboration in the Living Room or How Couples Design Together , ACM <i>NordiCHI 2016</i> poster | |
| Minjoo Cho, Bokyung Lee, Joonhee Min, Daniel Saakes., Sketching in Virtual Reality for Rapid and Situated Idea Generation , <i>KSDS 2015</i> Fall paper | 2015 |

Bokyung Lee, Froukje Sleswijk 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

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

TEACHING EXPERIENCE

Democratization of Design - Yeonsei University (special lecturer)	Spring 2021
Scientific Research Paper Writing - Yeonsei University (special lecturer)	Spring 2021
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

Living Lab and Digital Twins	2020-current
Designing and Simulating Digital Humans in the Virtual Space for Space/Product Design Evaluation	2020-current
Vision-based Social Interaction Analysis for Human-Centered Architecture	2020-current
Design Toolkits for Everybody with VR/AR Technology <i>project manager</i>	2015-2018
AI/AR Personal Health Recommendations for Mobile Computing at Home <i>project manager</i>	2018
AI/AR Personal Health Recommendations for Mobile Computing at Home <i>project lead</i>	2018
Gesture-based Trafficator to Enhance Human-Automobile Interaction <i>teaching assistant</i>	2017
Augmented Reality Interface for the Internet of Things <i>participating researcher</i>	2016-2018
An Interactive Tabletop to Support Surveillance Scenarios with UAVs <i>participating researcher</i>	2015
Design for the Next Generation UX-Oriented Mobile Software Platform <i>researcher</i>	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 Review: ACM CHI, Architecture and Design Journal	2021
Academic Review: ACM CHI, ACM Siggraph E-tech, ACM DIS, ACM IDC	2020
Academic Review: ACM CHI, ACM Siggraph Asia	2019
Academic Review: ACM CHI, ACM CHI Play, ACM CSCW, ACM DIS, ACM TEL, ACM UIST	2018
Academic 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