

Seongkook Heo

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Education

2009–present	Ph.D.(ABD), Computer Science, KAIST, Daejeon, South Korea.
2007–2009	MSc, Digital Media, KAIST, Daejeon, South Korea.
2002–2007	BSc, Electric and Electronic Engineering, Sungkyunkwan University, Suwon, South Korea.
2002–2007	BSc, Computer Engineering, Sungkyunkwan University, Suwon, South Korea. (Double Major)

Internships

2016 Jan - current	Autodesk Research, Toronto, Canada Research Intern supervised by Tovi Grossman Wearable interaction techniques
2015 May - Aug	Microsoft Research, Redmond, USA Research Intern supervised by Ken Hinckley Mobile sensing and interaction
2008 Jun - Aug	Samsung Advanced Institution of Technology (SAIT), Suwon, South Korea Research Intern at Multi-modal Interaction Lab Participated in designing new interaction technique for consumer electronics
2005–2006	AhnLab, Seoul, South Korea Software Engineering Intern Testing personal security software UI and features

Peer-reviewed Papers and Notes

2016	Ken Hinckley, Seongkook Heo , Christian Holz, Hrvoje Benko, Abigail Sellen, Richard Banks, Kenton O'Hara, Gavin Smyth, and William Buxton. Pre-Touch Sensing for Mobile Interaction. <i>CHI '16 (To appear)</i> , 2016.
2015	Jonggi Hong, Seongkook Heo , Poika Isokoski, and Geehyuk Lee. SplitBoard: A Simple Split Soft Keyboard for Wristwatch-sized Touch Screens. <i>CHI '15</i>
2014	Seongkook Heo , Jiseong Gu, and Geehyuk Lee. Expanding Touch Input Vocabulary by Using Consecutive Distant Taps. <i>CHI '14</i>
2014	Jaehyun Han, Seongkook Heo , Hyong-Euk Lee, and Geehyuk Lee. IrPen: A 6-DOF Pen System to Support Over-the-surface Interactions with Tablet Computers. <i>IEEE Computer Graphics and Applications</i> , 34(3)

- 2013 **Seongkook Heo**, Jaehyun Han, and Geehyuk Lee.
Designing Rich Touch Interaction through Proximity and 2.5D Force Sensing Touchpad, *OZCHI '13*
- 2013 **Seongkook Heo** and Geehyuk Lee.
Indirect Shear Force Estimation for Multi-Point Shear Force Operations. *CHI '13*
- 2013 Jiseong Gu, **Seongkook Heo** Jaehyun Han, Sunjun Kim, and Geehyuk Lee.
LongPad: A TouchPad Using the Whole Area below the Keyboard on a Laptop. *CHI '13*
- 2013 Jinhyuk Choi, **Seongkook Heo**, Jaehyun Han, Geehyuk Lee, and Junehwa Song,
Mining Social Relationship Types in an Organization by using Communication Patterns, *CSCW '13*
- 2012 Jaehyun Han, Sangwon Choi, **Seongkook Heo**, and Geehyuk Lee.
Optical touch sensing based on internal scattering in a touch surface. *Electronics Letters*, 48(22):1420-1422, 2012
- 2012 **Seongkook Heo** and Geehyuk Lee.
ForceDrag: Using Pressure as a Touch Input Modifier. *OZCHI '12*
- 2011 **Seongkook Heo**, Jaehyun Han, Sangwon Choi, Seunghwan Lee, Geehyuk Lee, Hyong-Euk Lee, SangHyun Kim, Won-Chul Bang, DoKyoon Kim, and ChangYeong Kim.
IrCube tracker: an optical 6-DOF tracker based on LED directivity. *UIST '11*
- 2011 **Seongkook Heo** and Geehyuk Lee.
Force gestures: augmenting touch screen gestures with normal and tangential forces. *UIST '11*
- 2011 **Seongkook Heo** and Geehyuk Lee.
Forcetap: extending the input vocabulary of mobile touch screens by adding tap gestures. *MobileHCI '11*
- 2011 Jaehyun Han, **Seongkook Heo**, G Lee, Won-Chul Bang, DoKyoon Kim, and ChangYeong Kim.
6-DOF tracker using LED directivity. *Electronics Letters*, 47(3):177-178, 2011

Posters and Demonstrations

- 2014 Jaehyun Han, **Seongkook Heo**, and Geehyuk Lee.
Trampoline: A Double-sided Elastic Touch Device for Repousse and Chasing Techniques. *CHI '14 Works-in-progress*
- 2012 **Seongkook Heo**, Yong-ki Lee, Jiho Yeom, and Geehyuk Lee.
Design of a Shape Dependent Snapping Algorithm. *CHI '12 Works-in-progress*
- 2011 Sangwon Choi, Jaehyun Han, Sunjun Kim, **Seongkook Heo**, Geehyuk Lee,
ThickPad: A Hover-Tracking Touchpad for a Laptop, *UIST '11 Demo*
- 2011 **Seongkook Heo** and Geehyuk Lee.
Force gestures: augmented touch screen gestures using normal and tangential force. *CHI '11 Works-in-progress*
- 2008 **SeongKook Heo**, Dongwook Lee and Minsoo Hahn,
FloatingPad: A Touchpad Based 3D Input Device, *ICAT '08 Poster*
- 2008 Seungwoo Lee, **SeongKook Heo**, Youmin Kim, Youngjae Kim, Soojin Lee and Minsoo Hahn,
An Interactive Knocking Floor., *UbiComp 2008 Poster*
- 2007 Seungsoon Park, Seungwoo Lee, **SeongKook Heo**, Kyoungsin Park, and Minsoo Hahn,
Escape!: An Indoor Location-based Horror Game Using Indirect Ambient Cues. *UCS 2007 Poster*

Book Chapters

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| 2015 | Seongkook Heo , Jaehyun Han, and Geehyuk Lee.
Designing for Hover-and Force-Enriched Touch Interaction. <i>Computer-Human Interaction. Cognitive Effects of Spatial Interaction, Learning, and Ability</i> , Springer, 2015. 68-87. |
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Teaching Assistant

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| Spring
2010, 11, 14 | KAIST, Computer Science Department
Teaching Assistant for Human-Computer Interaction |
| Fall 2010 | KAIST, Computer Science Department
Teaching Assistant for HCI - Physical Computing |
| Spring 2012 | KAIST, Computer Science Department
Teaching Assistant for Compiler Design |

Awards and Honors

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|--------------|--|
| 2013 | 2nd Place in <i>Most creative</i> , UIST 2013 Student Innovation Contest .
With Jiseong Gu, Jeongmin Son, and Eunhye Youn |
| 2012 | 2nd Place in <i>Peoples choice</i> , UIST 2012 Student Innovation Contest .
With Jaehyun Han, Jiseong Gu, and Hayan Choi |
| 2011 | 2nd Place in <i>Peoples choice</i> , UIST 2011 Student Innovation Contest .
With Sunjun Kim and Jiseong Gu |
| 2009–present | National Scholarship, KAIST |

Invited Talk

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| 2016 Jan. | Enriching Touch – with force, hover, and manual dexterity
University of Toronto |
| 2016 Jan. | Enriching Touch – with force, hover, and manual dexterity
Autodesk Research |
| 2014 Oct. | Enriching Touch
HiDeep Co. |
| 2014 Mar. | Enriching interaction on and over the surface
Korea Electronics Technology Institute |
| 2014 Feb. | Completing Touch
TEDxKAIST Salon: Beyond Now |

Academic Service

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|----------------------|---|
| Program
Committee | MobileHCI 2015 |
| Reviewer | CHI 2011, 2012, 2013, 2014, 2016, ICMI 2015, SIGGRAPH ASIA 2014, TEI 2013, 2015, MobileHCI 2012, 2016, UIST 2016 |
| Student
Volunteer | World Haptics Conference 2015 |

Last updated: 2016 Apr.