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## | Educational background

2005 : Dept. of ME, Yonsei University (BS)

2007 : Dept. of ME, KAIST (MS)

2013 : Dept. of ME, KAIST (Ph. D)

## | Major careers

2011–2012 Lab associate, Interaction Group at Disney Research  
Pittsburgh

2013–2014 Postdoc researcher, Human–robot Interaction Research  
Center, KAIST

2014–2017 Senior researcher, Samsung Advanced Institute of  
Technology

## | Studies & Books

### ■ International Journal

Knocking and Listening: Learning Mechanical Impulse Response for Understanding Surface Characteristics  
Semin Ryu and Seung-Chan Kim  
Signal Processing Techniques for Smart Sensor Communications  
Sensors 2020, to be published

Context-aware Winter Sports based on Multivariate Sequence Learning  
Byung-Kil Han, Je-Kwang Ryu, Seung-Chan Kim  
Sensors 2019, 19(15), 3296

DeepSnake: Sequence Learning of Joint Torques Using a Gated Recurrent Neural Network  
Byung-Kil Han, Seung-Chan Kim, Dong-Soo Kwon  
IEEE Access ( Volume: 6 ), 2018, pp. 76263 – 76270

Towards Shape-Changing Devices: Physical Interface Control with an Active Contour Model  
Byung-Kil Han, Seung-Chan Kim, Dong-Soo Kwon  
Symmetry 10 (3), 2018, 57

Haptic Rendering of 3D Geometry on 2D Touch Surface based on Mechanical Rotation  
Seung-Chan Kim, Byung-Kil Han, Dong-Soo Kwon  
IEEE Trans. on Haptics 11 (1), 2018, pp. 140–145

Biometrics for Electronic Eyes: System Authentication with Embedded CMOS Image Sensor  
Seung-Chan Kim, Soo-Chul Lim, Jungsoo Shin, and Jaehyuk Choi  
IEEE Trans. on Consumer Electronics 62(3), 2016, pp. 209–215

Biometrics for Electronic Eyes: System Authentication with Embedded CMOS Image Sensor  
Seung-Chan Kim, Soo-Chul Lim, Jungsoon Shin, and Jaehyuk Choi  
IEEE Trans. on Consumer Electronics 62(3), 2016, pp. 209-215

Transferring Data from Smartwatch to Smartphone through Mechanical Wave Propagation  
Seung-Chan Kim, Soo-Chul Lim  
Sensors 15(9), 2015: pp. 21394-21406

Expansion of Smartwatch Touch Interface from Touchscreen to Around Device Interface Using Infrared Line Image Sensors  
Soo-Chul Lim, Jungsoon Shin, Seung-Chan Kim and Joonah Park  
Sensors 15(7), 2015: pp. 16642-16653

Haptic Interaction with Objects in a Picture based on Pose Estimation  
Seung-Chan Kim, Dong-Soo Kwon  
Multimedia Tools and Applications, Springer, 2013, 72(2), pp. 2041 - 2062

#### ■ International Conference

Emulating Touch Signals from Multivariate Sensor Data using Gated RNNs  
Seung-Chan Kim, Byung-Kil Han  
14th ACM/IEEE International Conference on Human-Robot Interaction (HRI), Late Breaking Reports, 2019

Haptic Rendering of Virtual Geometry on Robotic Touch Surface  
Seung-Chan Kim, Byung-Kil Han, Dong-Soo Kwon

ACM Siggraph ASIA Emerging Technology 2014

Tactile Rendering of 3D Features on Touch Surfaces  
Seung-Chan Kim, Ali Israr, Ivan Poupyrev  
ACM UIST 2013

Haptic Interaction with Objects in a Picture based on Surface Normal Estimation  
Seung-Chan Kim, Dong-Soo Kwon  
IEEE World Haptics 2013  
NOMINATED FOR BEST STUDENT PAPER AWARD

Feeling the Unseen: Physical Interaction with Depth-embedded Images  
Seung-Chan Kim, Byung-Kil Han, Dong-Soo Kwon  
ACM CHI 2013, Extended Abstract

Tactile Feedback on Flat Surfaces for the Visually Impaired.  
Ali Israr, Olivier Bau, Seung-Chan Kim and Ivan Poupyrev  
ACM CHI 2012, Extended Abstract

Surround Haptics: Tactile Feedback for Immersive Gaming Experiences  
Ali Israr, Seung-Chan Kim, Jan Stec and Ivan Poupyrev  
ACM CHI 2012, Extended Abstract

Physical mobile interaction with kinesthetic feedback  
Byung-Kil Han, Seung-Chan Kim, Soo-Chul Lim, Dongbum Pyo, Dong-Soo Kwon  
Haptics Symposium 2012, Vancouver, Canada, pp.571-575

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#### | Others

2014, Excellence award by KROS : Korea Robotics Society  
Seung-Chan Kim, Dong-Soo Kwon

2009, "Future Game Contest" : Golden Prize Hosted by KAIST Institute for Entertainment Engineering  
Seung-Chan Kim, Andrea Bianchi, Soo-Chul Lim, Jong Gwan Lim, Byung-Kil Han