

# Seungjae Oh

HUMAN-COMPUTER INTERACTION · HAPTICS · LEARNING TECHNOLOGIES

Room 115, Engineering Building 4, Pohang University of Science and Technology, Chungam-ro, Pohang, 37673, Rep. of Korea

☎ (+82) 10-7104-8042 | ✉ seungjae.oh7@gmail.com | 🌐 <https://lokilike.netlify.com> | 📺 seungjae329

“I am a Human-Computer Interaction researcher interested in Haptics, Sensing Technologies, and Learning Technologies”

## Education

### Pohang University of Science and Technology (POSTECH)

Ph.D. Creative IT Engineering (Summa Cum Laude).

- Thesis: Enriching Haptic Interaction with Tangible Objects by Vibration Analysis
- Advisor: Seungmoon Choi

Pohang, South Korea

Mar 2012 - Feb 2020

### Technische Universität Berlin (TU Berlin)

Exchange Student, Informatiks.

Berlin, Germany

Apr 2011 - Sep 2011

### Pohang University of Science and Technology (POSTECH)

B.S. Electrical Engineering (Summa Cum Laude).

Pohang, South Korea

Mar 2008 - Feb 2012

## Professional Experience

### Kyung Hee University

Assistant Professor, Dept. of Software Convergence.

Yongin, South Korea

Sep 2022 - Present

### Pohang University of Science and Technology (POSTECH)

Postdoctoral Researcher, Dept. of Computer Science and Engineering.

Advisor: Seungmoon Choi

Pohang, South Korea

Feb 2020 - July 2022

### Pixels.IO

Intern. Developed an iPhone application for marker-based interaction for large public displays.

Mentors: Grace Woo and Szymon Jakubczak.

Boston, USA

Jun 2013 - Aug 2013

### Fujitsu Laboratories Ltd.

Undergraduate Intern. Measured the performance of MRAM (Magnetic Random Access Memory).

Mentor: Youngmin Lee

Kanagawa, Japan

Feb 2009

## Awards & Honors

2021 **Best Paper Award**, Korea Computer Congress 2021

2020 **Postdoctoral Fellowship Program**, National Research Foundation of Korea

PI: Seungjae Oh

2019 **Best Poster/Demo Award**, Asian CHI Symposium (ACM CHI 2019 Workshop)

2019 **MSRA Collaborative Research Grant**, Microsoft Research Lab Asia

PI: Seungmoon Choi

2019 **Outstanding Presentation Award**, ACM SIGCHI Korea Local Chapter Spring Academic Workshop

2017 **Excellence Award**, The 3rd Makers Contest at POSTECH

2014 **Top 250 out of 1000 selected applicants**, Intel RealSense Application Challenge (IDEA Phase)

2013 **Best Poster Award**, ACM Symposium on Spatial User Interaction

2012 **Graduate Scholarship**, Kwanjeong Educational Foundation

2010 **Undergraduate Student Scholarship Program**, Korea Foundation for Advanced Studies

2008 **National Scholarship for Science and Engineering**, Ministry of Education, South Korea

# Patents

---

## DOMESTIC PATENTS

### D.3 APPARATUS AND METHOD FOR RENDERING TACTILE TO PROVIDE MULTIPLE SENSE

10-2019-0156899

2019.12.06

Chaeyong Park, **Seungjae Oh**, and Seungmoon Choi

### D.2 OBJECT IDENTIFICATION APPARATUS AND METHOD, SYSTEM COMPRISING THE SAME

10-2272641

2019.11.29

**Seungjae Oh**, and Seungmoon Choi

2021.6.29

### D.1 3D INTERACTION METHOD FOR DISPLAY

10-1847577

2016.9.30

Heejin Kim, **Seungjae Oh**, Sung H. Han, and Min K. Chung

2018.4.4

# Professional Service

---

- 2021 **Reviewer**, ACM UIST (**1 Special Recognitions of Outstanding Reviews**). ACM CHI. ACM IMMUT. IEEE World Haptics.
- 2020 **Reviewer**, ACM UIST (**2 Special Recognitions of Outstanding Reviews**). IEEE RA-L. Eurohaptics. ACM CHI LBW.
- 2019 **Reviewer**, Computers & Education, ACM SIGGRAPH Asia Emerging Technologies, ACM CHI LBW
- 2016 **Student Volunteer**, ACM TEI

# Teaching & Mentoring

---

- Spring 2021 **Mentoring**, Minjae Mun, Masters, POSTECH. Best Paper Award at Korea Computer Congress 2021.
- Spring 2020 **Mentoring**, Hyoseung Lee, Masters, POSTECH. Full paper submitted to IEEE Transactions on Haptics.
- Spring 2019 **Mentoring**, Jinsoo Kim, Undergraduate, POSTECH. Full paper published in ACM CHI.
- Spring 2014 **Teaching Assistant**, Human-centered Design: Theory and Practice, POSTECH (CITE390E)
- Spring 2015 **Teaching Assistant**, Human-centered Design: Theory and Practice, POSTECH (CITE390E)
- Fall 2015 **Teaching Assistant**, Human-centered Design Studio, POSTECH (CITE305)

# Technical Skills

---

## Hardware

- Actuators: Shaker, Surface transducer, Voice coil, and ERM/LRA
- Sensors: Load cell, Accelerometer, Force/Torque sensor, Microphone, and Contact Microphone
- Data Acquisition: NI DAQ, Soundcard Real-time Processing, and Arduino
- Virtual Reality: Oculus Rift, HTC Vive, Meta One, and Microsoft HoloLens
- Others: Iphone, Android, Optitrack Trio, Microsoft Kinect, Philips Hue & Bridge, Laser cutter, and 3D printer

## Experiment and Analysis

- Statistical Analysis: Comparison (Parametric & Non-parametric), Regression, Dimension Reduction, and Survey Analysis
- Human Experiment: Psychophysics & Perception, Human Performance, Quantitative, and Qualitative

## Data Analysis

- Spectral Analysis, Signal Processing, and Machine Learning

## Software

- Programming: Matlab, Python, Processing, Java, and C#
- Tools: R, Adobe Photoshop & Illustrator, LaTeX, and Microsoft Office