# Seungjae Han

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### **EDUCATION**

2020 – Current KAIST

Ph.D. Candidate in School of Electrical Engineering

Advisor: Young-Gyu Yoon

2017 ~2020 Yonsei University

Bachelor of Science in School of Integrated Technology

Advisor: Jiwon Seo

PREPRINTS (\*co-first authors)

[1] J. Sim\*, C. E Park\*, I. Cho\*, K. Min, M. Eom, **S. Han**, H. Jeon, H.-J. Cho, E.-S. Cho, A. Kumar, Y. Chong, J. S. Kang, K. D. Piatkevich, E. E. Jung, D.-S. Kang, S.-K. Kwon, J. Kim, K.-J. Yoon, J.-S. Lee, E. S. Boyden, Y.-G. Yoon, J.-B. Chang, "Nanoscale resolution imaging of the whole mouse embryos and larval zebrafish using expansion microscopy", *bioRxiv*, 2022.

JOURNALS (\*co-first authors)

[2] E.-S. Cho\*, S. Han\*, K.-H. Lee, C.-H. Kim, Y.-G.Yoon, "3DM: Deep decomposition and deconvolution microscopy for rapid neural activity imaging", *Optics Express*, 2021. (Editors' Pick, Image of the Week)

### INTERNATIONAL CONFERENCES

- [1] S. Han, E.-S. Cho., I. Park, K. Shin, Y.-G.Yoon, "Efficient Neural Network Approximation of Robust PCA for Automated Analysis of Calcium Imaging Data", 24<sup>th</sup> International Conference on Medical Image Computing & Computer Assisted Intervention (MICCAI), 2021.
- [2] **S. Han**, T. Kang, J. Seo, "Smartphone Application to Estimate Distances from LTE Base Stations Based on Received Signal Strength Measurements", 34<sup>th</sup> International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC), 2019. (Oral)
- [3] H.-S. Moon, W. Kim, **S. Han**, J. Seo, "Observation of Human Trajectory in Response to Haptic Feedback from Mobile Robot", 18<sup>th</sup> International Conference on Control, Automation and Systems (ICCAS), 2018.

### **DOMESTIC CONFERENCES**

- [1] **S. Han**, S. Kim, J. Seo, "Machine Learning Based Sound Source Localization in the Indoor Environment", *2019 Korean Navigation Institute (KONI) Conference*, 2019.
- [2] S. Kim, S. Han, J. Seo, "Sound Source Localization in the Indoor Environment Based on Time Difference of Arrival Measurements", 2019 Korean Navigation Institute (KONI) Conference, 2019.
- [3] **S. Han**, H. -S. Moon, J. Seo, "Development of Human Following Mobile Robot Utilizing Haptic Signals", *2018 Korean Navigation Institute (KONI) Conference*, 2018.

# **AWARDS & HONORS**

Undergraduate Research Program (Research fund) & Best Project Award

2019, Korea Foundation for the Advancement of Science & Creativity

Short-term visiting researcher to Boğaziçi University, Turkey (Travel and lodging cost)

2019, Yonsei University

IT Consilience Creative Program (Tuition waiver & Stipend)

2017 ~ 2019, Ministry of Science, ICT and Future Planning

# TEACHING EXPERIENCES

# **Teaching Assistant**, KAIST

Special Topics in Electrical Engineering <AI Capston Design> (EE488) Electronics Design Lab. (EE405A) Basics of Artificial Intelligence (CoE202A)

Spring, 2022 Fall, 2021

Spring, 2021 & Fall, 2020

# **REFERENCES**

Available upon request.