CURRICULUM VITAE

Hyeok-Don Kwon
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EDUCATION

Hallym University, Chuncheon, South Korea
Bachelor of Division of Software 2018 – Present
4.14/4.5 GPA

RESEARCH INTEREST

Machine Learning for Wireless/Mobile Network
Network optimization based on channel status

PUBLICATION

Journal Papers (written in Korean)

1. **Hyeok-Don Kwon**, Sol-Bee Lee, Jung-Hyok Kwon, Eui-Jik Kim, "Smoothed RSSI-Based Distance Estimation Using Deep Neural Network", Journal of Internet of Things and Convergence, pp. 71-76 Apr. 2023 [KCI]

Conference Papers (written in Korean)

1. **Hyeok-Don Kwon**, Sol-Bee Lee, Jung-Hyok Kwon, Eui-Jik Kim, "Development of a Channel State Information Capture System using Nexmon Open-Source Firmware", 2023 KIEES Winter Conference, Jeju, South Korea, Feb. 2023.

PATENTS

1. Eui-Jik Kim, **Hyeok-Don Kwon**, Sol-Bee Lee, Jung-Hyok Kwon, "Electronic apparatus for performing smoothing based preprocessing for RSSI value corresponding input data of artificial intelligence model", KR-Application No. 10-2022-0179501, Dec 2022

2. Eui-Jik Kim, **Hyeok-Don Kwon**, Sol-Bee Lee, Jung-Hyok Kwon, "Electronic apparatus for including multi-input deep neural network model for performing distance estimation", KR-Application No. 10-2022-0179502, Dec 2022

EXPERIENCES

Undergraduate researcher October 2021 – Present
Convergence Information and Communications Laboratory, Hallym University, South Korea

- ✧ **Project: Development of convergence IoT pedestrian and driver safety solution using wireless tags and radar**
- Developed RSSI testbed using ibeacon and raspberry pi.
- Developed channel state information (CSI) testbed using raspberry pi and open-source libraries (Nexmon and Nexmon-csi).
- Proposed preprocessing module which performs de-noising and mission value imputation.
- Proposed RSSI-distance estimation model based on multi-input solo-output Deep neural network (MISO DNN).
- Developed CSI-distance estimation model based on DNN.

AWARD & HONOR

Department Chair Recommendation Scholarship (Hallym University) [Fall 2021, Fall 2022]
Academic Excellence Scholarship (Hallym University) [Fall 2021 – Fall 2023]
Award in Software Capstone Design (Hallym University) [Spring 2023]

SKILLS

Programming Languages: Python, Java, C, MATLAB
Tools: TensorFlow, MySQL, Office