

CURRICULUM VITAE

Jaehyeok Shim

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(last update: December 15, 2023)

EDUCATION

Ulsan National Institute for Science and Technology (UNIST)

Master's Student

Artificial Intelligence Graduate School

Advisor: Prof. Kyungdon Joo

Ulsan, Republic of Korea

Sep. 2021 – Aug. 2023

Seoul National University for Science and Technology (SNUT)

Undergraduate Student

Department of Information and Electricity

Unmanned Software Engineering Program Track (Double Major)

Advisor: Prof. Yeejin Lee

Seoul, Republic of Korea

Mar. 2015 – Aug. 2021

RESEARCH EXPERIENCES

3D Vision & Robotics Lab, UNIST

Researcher, [link]

Ulsan, Republic of Korea

Sep. 2023 – Feb. 2024

3D Vision & Robotics Lab, UNIST

Master's Degree, [link]

Ulsan, Republic of Korea

Sep. 2021 – Aug. 2023

Visual Computing Lab, SNUT

Undergraduate Researcher, [link]

Seoul, Republic of Korea

Jun. 2020 – Aug. 2021

INTERNATIONAL CONFERENCES

[IC.3] Jaehyeok Shim, Kyungdon Joo. **DITTO: Dual and Integrated Latent Topologies for Implicit 3D Reconstruction** (under review).

[IC.2] Dongjun Gu, Jaehyeok Shim, Jaehoon Jang, Changwoo Kang, and Kyungdon Joo. **ContactGen: Contact-Guided Interactive 3D Human Generation for Partners** (AAAI 2024).

[IC.1] Jaehyeok Shim, Changwoo Kang, Kyungdon Joo. **Diffusion-Based Signed-Distance-Fields for 3D Shape Generation** (CVPR 2023). [Project Page] Paper

DOMESTIC JOURNALS

[DJ.1] Yeejin Lee, Jaehyeok Shim, Eunhee kim. **Analysis of Radar Signal Detection Performance Using Deep Convolutional Neural Network** (방송공학회논문지, 28(4), 439-447, 10.5909/JBE.2023.28.4.439).

AI COMPETITIONS

- [C.9] **KYOWON Group OCR Challenge, DAICON.**
(Dec. 2022) Rank 7/430 (2% win) [Site]
OCR task of the Korean language. Improved accuracy with transfer learning of ConvNeXT by proposing language-specific loss.
- [C.8] **NAVER CLOVA AI-RUSH 2022 Round 2, NAVER CLOVA.**
(Aug. 2022) Rank 7/15 (46%) [Site]
A task that regresses a specific score of a given image. Improved accuracy with transfer learning of CoaT with various augmentation.
- [C.7] **NAVER CLOVA AI-RUSH 2022 Round 1, NAVER CLOVA.**
(Aug. 2022) Rank 15/27 (56%) [Site]
A task that classifies given images. Improved accuracy through transfer learning of EfficientNetV2 with various augmentations.
- [C.6] **Ego-Vision Hand Gesture Recognition AI Contest, NIA; DAICON.**
(Jun. 2021) Rank 3/290 (1%, win) [Code] [Site]
Classifies hand gestures from given images. Achieved high accuracy with transfer learning of EfficientNetV2 with cross-validation.
- [C.5] **News Topic Classification AI Contest, DAICON.**
(May. 2021) Rank 3/256 (1%, win) [Code] [Site]
Classifies topics of given text articles. Improved accuracy with Noisy Student training strategy about the BeRT-based model.
- [C.4] **NAVER CLOVA AI-RUSH 2021 Round2, NAVER CLOVA**
(May. 2021) Rank 6/13 (46%) [Site]
Clustering of given text dataset. Improved model performance with self-supervised learning.
- [C.3] **NAVER CLOVA AI-RUSH 2021 Round1, NAVER CLOVA**
(Apr. 2021) Rank 4/35 (11%) [Site]
Classification of given image dataset with limited model capacity. Achieved high accuracy with transfer learning of EfficientNetV2 with careful hyperparameter tuning.
- [C.2] **Predicting Danger of System Log Messages, KAERI; DAICON**
(Apr. 2021) Rank 2/152 (1%, win) [Site] [Description] [Code]
Finding out-of-distribution data that does not appear in the training dataset. I achieved high accuracy with DistilBeRT-based anomaly detection.
- [C.1] **Finding Human Key-Points from Motion Images, DAICON**
(Feb. 2021) Rank 1/156 (1%, win) [Site] [Description] [Code]
Estimating human key points from a given image dataset. I fine-tuned HRNet and EfficientDet and achieved high accuracy by proposing novel data-driven augmentations.

MILITARY SERVICE

Completing Military Service as a Sergeant
The 1st Division, Computer Technician

Paju, Republic of Korea
Aug. 2016 – May. 2018