Chunghyun Park

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EDUCATION

POSTECH Pohang, South Korea

Ph.D. in Artificial Intelligence

March 2022 - Present

• Supervised by Prof. Jaesik Park in the Computer Vision Lab.

• Research Interest: 3D Perception, 3D Reconstruction, and Geometric Deep Learning

POSTECH Pohang, South Korea

M.S. in Artificial Intelligence

March 2020 - Feb. 2022

• Advisor: Prof. Jaesik Park

• Master's thesis: Fast Point Transformer for Large-scale 3D Scene Understanding

POSTECH Pohang, South Korea

B.S. in Mechanical Engineering

March 2014 - Feb. 2019

International Publications

[1] Seungwook Kim*, Yoonwoo Jeong*, Chunghyun Park*, Jaesik Park, and Minsu Cho (*equal contribution)

SeLCA: Self-Supervised Learning of Canonical Axis

Conference on Neural Information Processing Systems Workshop - Symmetry and Geometry in Neural Representations (NeurReps), 2022

[2] Jaesung Choe*, Chunghyun Park*, Francois Rameau, Jaesik Park, and In So Kweon (*equal contribution)

PointMixer: MLP-Mixer for Point Cloud Understanding

European Conference on Computer Vision (ECCV), 2022

[3] Chunghyun Park, Yoonwoo Jeong, Minsu Cho, and Jaesik Park

Fast Point Transformer

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022

[4] Yunseob Hwang*, Han Hee Lee*, Chunghyun Park, Bayu Adhi Tama, Jin Su Kim, Dae Young Cheung, Woo Chul Chung, Young-Seok Cho, Kang-Moon Lee, Myung-Gyu Choi, and Seungchul Lee (*equal contribution)

Improved Classification and Localization Approach to Small Bowel Capsule Endoscopy using Convolutional Neural Network

Digestive Endoscopy, 2021 (IF: 7.559)

Projects

Open3D | An open-sourced 3D vision library

Sep. 2021 – Present

- Collaboration with Intel Corp., USA.
- Currently working on a high-fidelity 3D reconstruction system.
- Contributed to the neighbor search modules for the release of Open3D 0.16.

3D human capturing system | Multi-way registration and gaze estimation

March 2020 - Oct. 2020

- Collaboration with Electronics and Telecommunications Research Institute (ETRI), South Korea.
- Implemented software for matching colored point clouds from multiple RGB-D cameras to capture 3D humans.
- Developed an algorithm to estimate the gaze of 3D humans by predicting facial landmarks.

AI in Healthcare | Capsule endoscopy video understanding

April 2018 – June 2019

- Collaboration with the Catholic Univ. of Korea Seoul St. Mary's Hospital, South Korea.
- Developed an algorithm for automatically detecting pathologies in full-length capsule endoscopy videos.
- Implemented software of the developed algorithm with a graphical user interface for medical doctors.

Professional Services

- Reviewer, IEEE/CVF International Conference on Computer Vision (ICCV), 2023
- Reviewer, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022-2023
- Reviewer, European Conference on Computer Vision (ECCV), 2022

AWARDS

- BK21 Best Paper Award (Grand Prize), POSTECH GSAI, 2023
- Qualcomm Innovation Fellowship 2022 Winner (Fast Point Transformer), Qualcomm Korea Corp., 2022
- Qualcomm Innovation Fellowship 2022 Finalist (PointMixer), Qualcomm Korea Corp., 2022
- The 28th HumanTech Paper Award (Silver Prize), Samsung Electronics Co. Ltd., 2022