

Curriculum Vitae

Name: Taeyoung Son (손태영)

Date of birth: 1996 / 04 / 23

Email: ty.son@postech.ac.kr

Phone: +8210-5755-6746

LinkedIn: <https://www.linkedin.com/in/taeyoungson/>

Skills: Python, PyTorch, Docker, Vim

Publications

WEDGE: Web-Image Assisted Domain Generalization for Semantic Segmentation

Namyup Kim, **Taeyoung Son**, Jaehyun Pahk, Cuiling Lan, Wenjun Zeng, Suha Kwak

IEEE International Conference on Robotics and Automation (ICRA), 2023

- Domain: *Domain generalization*
 - <https://arxiv.org/abs/2109.14196>
-

FIFO: Learning Fog-Invariant Features for Foggy Scene Segmentation

Sohyun Lee, **Taeyoung Son**, Suha Kwak

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2022 (Oral, Best Paper Finalist)

- Domain: *Domain adaptation, Autonomous driving, Robust recognition*
 - <https://arxiv.org/abs/2204.01587>
-

URIE: Universal Image Enhancement for Visual Recognition in the Wild

Taeyoung Son, Juwon Kang, Namyup Kim, Sunghyun Cho, Suha Kwak

European Conference on Computer Vision (ECCV), 2020

- Domain: *Image enhancement, Robust recognition*
 - <https://arxiv.org/abs/2007.08979>
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Education

Mar. 2020 – Mar. 2022

M.S., POSTECH (Pohang University of Science and Technology)

- Department of Computer Science and Engineering (CSE)
- Computer Vision Laboratory ([link](#))
- Thesis: *Universal Image Enhancement for Robust Visual Recognition*
- Advisor: Prof. Suha Kwak

Mar. 2015 – Feb. 2020

B.S., POSTECH (Pohang University of Science and Technology)

- Department of Computer Science and Engineering (CSE)
 - Thesis: *Visual recognition under extreme condition*
 - Advisor: Prof. Suha Kwak
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Careers

April. 2022 – Present

AI Research Team Lead at Nalbi

- Implemented the state-of-the-art real-time on-device single-view 3D human mesh reconstruction algorithm, which deployed to Actionman iOS
- Implemented an automated SMPL (Skinned Multi-Person Linear Model) annotation pipeline from a ROKOKO motion capture suit
- Implemented a multi-view 3D human mesh reconstruction algorithm, which includes camera auto-calibration, synchronization, keypoint triangulation, floor and contact estimation, and inverse kinematics
- Implemented and optimized a 3d human mesh reconstruction AI model for real-time inference on cpu-only laptop
- Implemented an motion retargeting algorithm for real-time motion transfer between different shapes of people and characters
- As a team lead, managed and directed a group of 4 AI researchers over human motion capture, motion dataset generation, on-device neural network

optimization and other AI projects

June. 2019 – Aug. 2019

Research Scientist Internship at HyperConnect

- Developed a neural network model for screening abusing photos in huge, imbalanced dataset via self-supervised learning
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June. 2018 – Sept. 2018

Research Scientist Internship at HyperConnect

- Developed a neural network model for on-device image beautification using Look-up-table (LUT)
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Honors & Awards

- Seoul MaaS Hackerthon 우수상 2019 (Excellence Award)
 - Winner, Qualcomm Innovation Fellowship 2022
 - CVPR Best Paper Finalist, 2022 (Awarded to Top 0.4%)
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Media

- <https://news.mt.co.kr/mtview.php?no=2020091410243790785>
- <https://www.yeongnam.com/web/view.php?key=20220428010003756>
- https://www.youtube.com/watch?v=LCV7OD3qUcQ&list=PLW2dornev5K29hrj3RUBEBJznWh3-44pC&index=1&ab_channel=NALBI날비컴퍼니