Youngtaek Oh

PhD Student, Electrical Engineering, KAIST.

Email : youngtaek.oh@kaist.ac.kr
Webpage: https://ytaek-oh.github.io

Research Interest

My research interests lie in the intersection of Computer Vision and Machine Learning. Particularly, I focused on data-hungry problem (*e.g., semi-supervised learning*) and bias in data labels (*e.g., class-imbalance*). My ultimate research goal is to develop a reliable and responsible AI model in the real-world where robustness and fairness issues need to be addressed.

Education

Korea Advanced Institute of Science and Technology (KAIST) — Daejeon, South Korea
Ph.D. in Electrical Engineering; Co-advisors: In So Kweon and Junmo Kim — Sep. 2021 – Present

Korea Advanced Institute of Science and Technology (KAIST) — Daejeon, South Korea
M.S. in Electrical Engineering; Advisor: In So Kweon — Mar. 2019 – Feb. 2021
- Thesis: Robust Semi-Supervised Learning to Label Bias

Korea University — Seoul, South Korea
B.S. in Electrical Engineering; GPA: 4.40/4.5 — Mar. 2015 – Feb. 2018

Work Experience

Korea Advanced Institute of Science and Technology (KAIST) — Daejeon, South Korea
Researcher, Robotics and Computer Vision Lab. — Mar. 2021 - Aug. 2021

Publication

International Conferences

- DASO: Distribution-Aware Semantics-Oriented Pseudo-label for Imbalanced Semi-Supervised Learning.
  ***Youngtaek Oh**, Dong-Jin Kim, In So Kweon*
  - Conference on Computer Vision and Pattern Recognition (CVPR), 2022.
  - CVPR Workshop on Learning with Limited Labelled Data for Image and Video Understanding (L3D-IVU), 2022.
- KSL-Guide: A Large-scale Korean Sign Language Dataset Including Interrogative Sentences for Guiding the Deaf and Hard-of-Hearing.
  *Soomin Ham, Kibaek Park, YeongJun Jang, **Youngtaek Oh**, Seokmin Yun, Sukwon Yoon, Chang Jo Kim, Han-Mu Park, In So Kweon*
  - International Conference on Automatic Face and Gesture Recognition (FG), 2021.
- SideGuide: A Large-scale Sidewalk Dataset for Guiding Impaired People.
  Kibaek Park, **Youngtaek Oh***, Soomin Ham*, Kyungdon Joo*, Hyokyoung Kim, Hyoyoung Kum, In So Kweon*
  - International Conference on Intelligent Robots and Systems (IROS), 2020.

Ongoing Works

- *A work on new continuous sign language recognition (CSLR) framework.*
  *YeongJun Jang, **Youngtaek Oh**, Myungchul Kim, Byeong-Uk Lee, Jae Won Cho, Dong-Jin Kim, In So Kweon*
- *A work on benchmarking continuous sign language recognition (CSLR) task on new environments.*
  *YeongJun Jang, **Youngtaek Oh**, Jae Won Cho, Dong-Jin Kim, In So Kweon*

Academic Service

Conference Reviewer

- European Conference on Computer Vision (ECCV): 2022 (9 papers)
- Conference on Computer Vision and Pattern Recognition (CVPR): 2022 (2 papers)

Workshop Reviewer

- Workshop on Learning with Limited Labelled Data for Image and Video Understanding (CVPRW): 2022 (4 papers)

Selected Honors

Recipant, KAIST Scholarship — Sep. 2021 - Present
Recipant, Korea Government Scholarship — Mar. 2019 - Feb. 2021
Recipant, National Scholarship for Science and Engineering — Mar. 2017 - Feb. 2019

Teaching

Teaching Assistance (TA) at EE, KAIST

- EE735: Computer Vision (Fall, 2020)
- EE898: Advanced Topics in Deep Learning for Robotics and Computer Vision (Spring, 2020)
- EE405: Electronics Design Lab (Fall, 2019)