# SANGHUN JUNG

Email: sanghun.jung13@gmail.com Website: https://shjung13.github.io

### **EDUCATION**

### University of Washington (UW)

2022.09 -

Ph.D. in Computer Science and Engineering

Advisor: Prof. Byron Boots

## Korea Advanced Institute of Science and Technology (KAIST)

2020 - Present

M.S. in Artificial Intelligence Advisor: Prof. Jaegul Choo

GPA: 4.06 / 4.30

Korea University 2013 - 2019

B.S. in Computer Science and Engineering GPA: 3.70 / 4.50; Major GPA: 4.11 / 4.50 Military service during 2015 - 2016

#### RESEARCH INTEREST

Autonomous driving, robot learning, and robot perception

#### **PUBLICATIONS**

- [7] Jungsoo Lee, Juyoung Lee, **Sanghun Jung**, and Jaegul Choo. DebiasBench: Benchmark for Fair Comparison of Debiasing in Image Classification. arXiv preprint: 2206.03680, 2022. [paper]
- [6] **Sanghun Jung**, Jungsoo Lee, Nanhee Kim, and Jaegul Choo. CAFA: Class-Aware Feature Alignment for Test-Time Adaptation. arXiv preprint: 2206.00205, 2022. Under Review. [paper]
- [5] Minsoo Lee, Chaeyeon Chung, Hojun Cho, Minjung Kim, **Sanghun Jung**, Minhyuk Sung, and Jaegul Choo. 3D-GIF: 3D-Controllable Object Generation via Implicit Factorized Representations with Unposed 2D Images. arXiv preprint: 2203.06457, 2021. Under Review. [paper]
- [4] Kyungmin Jo\*, Gyumin Shim\*, **Sanghun Jung**, Soyoung Yang, and Jaegul Choo. CG-NeRF: Conditional Generative Neural Radiance Fields. arXiv preprint: 2112.03517, 2021. Under Review. [paper]
- [3] Sanghun Jung\*, Jungsoo Lee\*, Daehoon Gwak, Sungha Choi, and Jaegul Choo. Standardized Max Logits: A Simple yet Effective Approach for Identifying Unexpected Road Obstacles in Urban-Scene Segmentation. *International Conference on Computer Vision* (ICCV), 2021. Oral Presentation (3.0% acceptance rate) [paper] [code]
- [2] Sungha Choi\*, **Sanghun Jung**\*, Huiwon Yun, Joanne T. Kim, Seungryong Kim, and Jaegul Choo. RobustNet: Improving Domain Generalization in Urban-Scene Segmentation via Instance Selective Whitening. *Computer Vision and Pattern Recognition* (CVPR), 2021. **Oral Presentation** (4.1% acceptance rate) [paper] [code]
- [1] Jinho Choi, **Sanghun Jung**, Deokgun Park, Jaegul Choo, and Niklas Elmqvist. Visualizing for the Non-Visual: Enabling the Visually Impaired to Use Visualization. *Computer Graphics Forum* (**EuroVIS**), 2019. [paper]

#### PATENTS

- [2] Sanghun Jung, Henry A. Leinhos, Fangwei Li, Ina Liu. Method, System, and Non-Transitory Computer-Readable Recording Medium for Controlling a Robot. *US Patent in Progress*
- [1] Bryant L. Pong, Henry A. Leinhos, **Sanghun Jung**. Method, System, and Non-Transitory Computer-Readable Recording Medium for Controlling Movement of a Robot. *US Patent in Progress*

## WORK EXPERIENCE

Bear Robotics Korea Seoul, South Korea Robotics Engineer 2019 - 2020 Conducted projects such as safe velocity controller and odometry and localization testing **Bear Robotics** Redwood City, CA, US 2018 - 2019 Robotics Engineering Intern Developed robot algorithms such as depth camera extrinsic calibration SCHOLARSHIP KAIST Support Scholarship, KAIST 2020, 2021 Veritas Program Scholarship, Korea University 2018 Academic Excellence Scholarship for Freshmen, Korea University 2013 AWARDS Best Poster Award - Standardized Max Logits, KAIST AI Workshop 2022 INVITED TALKS KAIST AI Workshop Jan., 2022 Standardized Max Logits: A Simple yet Effective Approach for Identifying Unexpected Road Obstacles Hyundai Motor Group AI Research Seminar Jul., 2021 Domain Generalization in Urban-Scene Segmentation Naver AI LAB Jul., 2021 RobustNet: Improving Domain Generalization in Segmentation LANGUAGES English: fluent, TOEFL: 102 (RC: 29, LC: 26, SPK: 23, WRT: 24)

# Programming Skills

Korean: native

Languages: Python, C++, Bash

Technologies: Pytorch, Docker, Linux, Robot Operating System (ROS1)