Geonsoo Lee

Master's Student in Chungnam National University (CVIP Lab.)
472 E2 Building, 99 Daehak-Ro, Yuseong-Gu, Daejeon, South Korea
Contact: lgs9505@gmail.com

Website

- **Github**: https://github.com/2gunsu
- **LinkedIn**: https://www.linkedin.com/in/geonsoo-lee
- **Personal Site**: https://www.geonsoo-lee.com

Skills

- **Language**: Korean, English
- **Programming**: Python, Matlab, C/C++
- **Framework**: Pytorch, Detectron2, mmdetection3d

Principal Interests

Computer Vision, Machine Learning, Autonomous Driving, Monocular 3D Object Detection, Depth Estimation, Sensor Fusion

Academic Background

M.S., Electronic Engineering Mar 2021 - Feb 2023 (Scheduled)
Chungnam National University, Daejeon, South Korea

- GPA: 4.38/4.50
- Thesis: Robust Object Detection Methods for Multiple Domains with Insufficient Labels
- Advisor: Prof. Donghyeon Cho

B.S., Electronic Engineering Mar 2015 - Feb 2021
Chungnam National University, Daejeon, South Korea

- GPA: 4.24/4.50 (Rank in Class 3 out of 70)

International Journal

2. **Geonsoo Lee**, Jaekyu Lee, Jeonghyun Baek, Hoseong Kim, and Donghyeon Cho, Channel Sampler in Hyperspectral Images for Vehicle Detection, *IEEE Geoscience and Remote Sensing Letters*, Oct 2021
1. **Geonsoo Lee**[*], Sungeun Hong[*], and Donghyeon Cho, Self-supervised Feature Enhancement Networks for Small Object Detection in Noisy Images, *IEEE Signal Processing Letter*, May 2021

International Conference

1. Dae-Young Song, **Geonsoo Lee**, Heekyung Lee, Gi-Mun Um, and Donghyeon Cho, Weakly-Supervised Stitching Network for Real-World Panoramic Image Generation, *European Conference on Computer Vision (ECCV)*, Jul 2022

Projects

Personal Aug 2022 - Sep 2022
Reimplementation for MonoCon (AAAI, 2022)

- Pytorch Re-implementation of MonoCon
- Enhance Reproducibility by Removing Dependency on External Framework and Adding 3D Augmentation Method
- Project Page: https://github.com/2gunsu/monocon-pytorch

National Research Foundation of Korea (NRF) Jun 2021 (In Progress)
Tearhertz Wireless System for Cooperative Intelligent Edge Laboratory

- Development of Intelligent Terahertz Radar Communication Wireless System and Collaboration Network

Personal Nov 2020 - May 2021
Self-Supervised Feature Enhancement Networks

- Feature Activation Enhancement for Small Object Detection (SOD)
- Project Page: https://github.com/2gunsu/SPL2021-FEN

Agency for Defense Development (ADD) May 2020 - Nov 2021
Big Data Analysis for Hyper Spectral Images

- Efficient Band Estimation in Hyperspectral Images for Vehicle Detection
- Hypercube Compression

Capstone Design Mar 2020 - Dec 2020
Noise-Robust Traffic Density Estimation

- Reliable Traffic Density Estimation from Noisy Satellite Imagery
- Project Page 1: https://github.com/2gunsu/Traffic-Density-Estimator
- Project Page 2: https://github.com/EadCat/Road-Extraction

Awards

Outstanding Paper Award Feb 2022
Chungnam National University Institute of Technology for Convergence and Innovation

Outstanding Research Award Aug 2021
Chungnam National University Graduate School

AI Bootcamp Hackathon (Bronze Prize) Aug 2020
Software-Centered University Program in Chungnam National University

Teaching Experience

Teaching Assistant Sep 2022 - Oct 2022

Computer Programming 2 (1213-1004)

Instructor: Donghyeon Cho
Department of Electronic Engineering,
Chungnam National University

Teaching Assistant Sep 2021 - Dec 2021

Computer Programming 2 (38645-00)

Instructor: Donghyeon Cho
Department of Electronic Engineering,
Chungnam National University

Teaching Assistant Mar 2021 - Jun 2021

DSP and Filter (27255-00)

Instructor: Donghyeon Cho
Department of Electronic Engineering,
Chungnam National University