

# Geonsoo Lee

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Master's Student in [Chungnam National University \(CVIP Lab.\)](#)  
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Website	<ul style="list-style-type: none"><li>• <b>Github:</b> <a href="https://github.com/2gunsu">https://github.com/2gunsu</a></li><li>• <b>LinkedIn:</b> <a href="https://www.linkedin.com/in/geonsoo-lee">https://www.linkedin.com/in/geonsoo-lee</a></li><li>• <b>Personal Site:</b> <a href="https://www.geonsoo-lee.com">https://www.geonsoo-lee.com</a></li></ul>
Skills	<ul style="list-style-type: none"><li>• <b>Language:</b> Korean, English</li><li>• <b>Programming:</b> Python, Matlab, C/C++, HTML</li><li>• <b>Framework:</b> Pytorch, <a href="#">Detectron2</a>, <a href="#">mmdetection3d</a></li></ul>
Principal Interests	Computer Vision, Machine Learning, Autonomous Driving, Monocular 3D Object Detection, Depth Estimation, Sensor Fusion
Academic Background	<div><div><i>M.S., Electronic Engineering</i> <a href="#">Chungnam National University</a>, Daejeon, South Korea</div><div><ul style="list-style-type: none"><li>• GPA: 4.38/4.50</li><li>• Advisor: <a href="#">Prof. Donghyeon Cho</a></li></ul></div></div> <div><div><i>B.S., Electronic Engineering</i> <a href="#">Chungnam National University</a>, Daejeon, South Korea</div><div><ul style="list-style-type: none"><li>• GPA: 4.24/4.50 (Rank in Class 3 out of 70)</li></ul></div></div>
International Journal	<div>2. <b>Geonsoo Lee</b>, Jaekyu Lee, Jeonghyun Baek, Hoseong Kim, and Donghyeon Cho, <a href="#">Channel Sampler in Hyperspectral Images for Vehicle Detection</a>, <i>IEEE Geoscience and Remote Sensing Letters</i>, Oct 2021</div> <div>1. <b>Geonsoo Lee</b><sup>*</sup>, Sungeun Hong<sup>*</sup>, and Donghyeon Cho, <a href="#">Self-supervised Feature Enhancement Networks for Small Object Detection in Noisy Images</a>, <i>IEEE Signal Processing Letter</i>, May 2021</div>
International Conference	1. Dae-Young Song, <b>Geonsoo Lee</b> , Heekyung Lee, Gi-Mun Um, and Donghyeon Cho, Weakly-Supervised Stitching Network for Real-World Panoramic Image Generation, <i>European Conference on Computer Vision (ECCV)</i> , Jul 2022
Projects	<div><div><i>Personal</i> <i>Reimplementation for MonoCon (AAAI, 2022)</i></div><div><ul style="list-style-type: none"><li>• Pytorch Re-implementation of MonoCon</li><li>• Enhance Reproducibility by Removing Dependency on External Framework and Adding 3D Augmentation Method</li><li>• Project Page: <a href="https://github.com/2gunsu/monocon-pytorch">https://github.com/2gunsu/monocon-pytorch</a></li></ul></div></div> <div><div><i>National Research Foundation of Korea (NRF)</i> <i>Tearhertz Wireless System for Cooperative Intelligent Edge Laboratory</i></div><div>Jun 2021 (In Progress)</div></div>

- 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 2021  
 Software-Centered University Program in Chungnam National University

## Teaching Experience

Teaching Assistant Sep 2022 (In Progress)

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