

MYUNGSEO SONG

micmic123@snu.ac.kr ◇ Google Scholar ◇ Personal Homepage

RESEARCH INTERESTS

Machine learning and computer vision for real-world applications. Recently, I've been interested in 3D reconstruction and generation, particularly through approaches such as 3D Gaussian Splatting, Neural Radiance Fields (NeRFs), and generative models.

EDUCATION

Seoul National University

Mar 2018 - Aug 2026 (Expected)

B.S. in Computer Science and Engineering

Seoul, Korea

* Currently on leave of absence from my studies and will be resuming them.

* Includes 34-month mandatory military service in South Korea.

PUBLICATIONS

(Equal contribution is denoted by “*”.)

- [1] **Myungseo Song**, Jin-Woo Park, Jong-Seok Lee, “Exploring the Camera Bias of Person Re-identification,” *International Conference on Learning Representations (ICLR)*, 2025. ([Spotlight paper](#), [Accept. rate < 5%](#))
- [2] **Myungseo Song**, Jinyoung Choi, Bohyung Han, “A Training-Free Defense Framework for Robust Learned Image Compression,” *arXiv Preprint*, 2024.
- [3] *Seongyeon Park, ***Myungseo Song**, Bohyung Kim, Tae-Hyun Oh, “Unsupervised Pre-training for Data-Efficient Text-to-Speech on Low Resource Languages,” *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2023.
- [4] ***Myungseo Song**, *Seongyeon Park, Bohyung Kim, Tae-Hyun Oh, “Speech De-warping: Unsupervised Pre-training for Data-Efficient Text-to-Speech on Low Resource Languages,” *International Conference on Machine Learning (ICML) Workshop on Machine Learning for Audio Synthesis*, 2022. ([Oral presentation](#))
- [5] **Myungseo Song**, Jinyoung Choi, Bohyung Han, “Variable-Rate Deep Image Compression through Spatially-Adaptive Feature Transform,” *IEEE/CVF International Conference on Computer Vision (ICCV)*, 2021.

WORK EXPERIENCE

Lead Machine Learning Researcher

Nov 2023 - May 2025

mAy-I, Inc.

Seoul, Korea

- Co-leading research team for multi-camera people tracking and age estimation.
- Focused on unsupervised person re-identification (ReID), improving performance of product ReID model by +29.2% mAP on in-house benchmarks.
- Analyzed camera bias of person ReID and investigated debiasing methods, which was published at ICLR 2025 (Spotlight).
- Worked as part of mandatory military service.

Machine Learning Researcher

Oct 2021 - Oct 2023

CNAI, Inc.

Seoul, Korea

- Developed unsupervised pre-training method for label-efficient text-to-speech, leveraging large-scale unlabeled speech, which was published at ICML 2022 Workshop (Oral) and ICASSP 2023.

- Developed audio-driven talking face generation models and established data collection process for in-house studio.
- Worked as part of mandatory military service.

Research Intern

Computer Vision Lab in Seoul National University

Sep 2020 - Sep 2021

Seoul, Korea

- Advisor: Prof. Bohyung Han.
- Proposed variable-rate learned image compression framework capable of task-aware compression, which was published at ICCV 2021.
- Explored robustness of learned image compression models against adversarial attacks and proposed simple, training-free defense method for image compression (preprinted).

Research Intern

NCSoft, Inc.

Jul 2020 - Aug 2020

Pangyo, Korea

- Developed unsupervised image-to-image translation models to automatically generate icon images for video games.

Software Engineering Intern

Intellisys, Inc.

Jan 2020 - Feb 2020

Seoul, Korea

- Developed data pipeline system and QA platform for collecting data from web.

OTHER PROJECTS

Undergraduate Research Opportuniy Program (UROP)

Data Mining Lab in Seoul National University

Mar 2020 - Jun 2020

Seoul, Korea

- Advisor: Prof. U Kang.
- Developed GRU-based multi-behavior recommender system.

SKILLS

Programming Languages: Python, Java, C/C++

Deep Learning Frameworks: PyTorch, Tensorflow

Libraries & Tools: Numpy, Pandas, OpenCV, Git, Docker

ACADEMIC SERVICE

Reviewer

- Journal: TIP (2023)
- Conference: ICLR (2025), NeurIPS (2024), WACV (2023)