DONGYEUN LEE
Research Scientist @ KAIST

🌐 leedongyeun.github.io ✉ ledoye@kaist.ac.kr
📍 Daejeon, South Korea 💼 dongyeun-lee-07085918a

EDUCATION

Mar. 2021 - Aug. 2022	**Korea Advanced Institute of Science and Technology (KAIST)** M.S. in School of Electrical Engineering Advisor: Prof. Junmo Kim	**Daejeon, South Korea**
Mar. 2016 - Feb. 2021	**Korea Advanced Institute of Science and Technology (KAIST)** B.S. in School of Computing	**Daejeon, South Korea**

WORK EXPERIENCE

Apr. 2024 - Current	**Korea Advanced Institute of Science and Technology (KAIST)** Research Scientist (Alternative military service)	**Daejeon, South Korea**
May 2022 - Mar. 2024	**Klleon AI Research** AI Researcher (Alternative military service). Worked on a virtual human avatar.	**Seoul, South Korea**
Jan. 2020 - Jun. 2020	**Vision and Learning Laboratory, KAIST** Research Intern.	**Daejeon, South Korea**
Apr. 2019 - Aug. 2019	**Dabeeo** Research Intern. Worked on Arial Image Change Detection and Object Detection.	**Seoul, South Korea**

PUBLICATIONS

DMQ: Dissecting Outliers of Diffusion Models for Post-Training Quantization   **ICCV 2025**
Dongyeun Lee, Jiwan Hur, Hyounguk Shon, Jae Young Lee, Junmo Kim

Customized Image Generation through Contrastive Inversion   **CVPRW 2025**
Minseo Kim, Minchan Kwon, **Dongyeun Lee**, Yunho Jeon, Junmo Kim

RADIO: Reference-Agnostic Dubbing Video Synthesis   **WACV 2024**
Dongyeun Lee*, Chaewon Kim*, Sangjoon Yu, Jaejun Yoo[†], Gyeong-Moon Park[†]

Training Cartoonization Networks without Cartoon   **ICIP 2023**
Doyeon Kim, **Dongyeun Lee**, Donggyu Joo, Junmo Kim

Fix the Noise: Disentangling Source Feature for Controllable Domain Translation   **CVPR 2023**
Dongyeun Lee, Jae Young Lee, Doyeon Kim, Jaehyun Choi, Jaejun Yoo, Junmo Kim

Fix the Noise: Disentangling Source Feature for Transfer Learning of StyleGAN   **CVPRW 2022 (*Best Paper Award*)**
Dongyeun Lee, Jae Young Lee, Doyeon Kim, Jaehyun Choi, Junmo Kim

SELECTED PROJECTS

Jan. 2024 - Mar. 2024	**GPU-Accelerated Data Pipeline for Lip-Sync Discriminator** Optimized CPU-bound training pipeline of a lightweight model with heavy data processing and loading. Developed a high-throughput data pipeline using NVIDIA DALI, enabling batched GPU-side image/audio preprocessing and direct GPU loading. Achieved up to **28.63x** training speedup. **Tech:** Python, PyTorch, NVIDIA DALI	**Klleon AI Research**
May 2022 - Mar. 2024	**High-Fidelity Audio Driven Talking Head Synthesis** Led end-to-end development of core lip-sync pipeline including data collection, pre-processing, model architecture design, training, training pipeline optimization, and deployment. Improved output resolution by **2x** and enhanced image fidelity by **13%** over the prior internal baseline. **Tech:** Python, Pytorch. **Applied product:** Chat-Avatar, Klone Studio	**Klleon AI Research**
Apr. 2019 - Aug. 2019	**Arial Image Change Detection and Object Detection** Developed a change and object detection system for illegal structure detection and monitoring urban changes in Seoul and Daejeon. Overcame challenges in small-object detection and noisy backgrounds through iterative model optimization, improving F1 score from **0.60** to **0.95**. **Tech:** Python, Keras.	**Dabeeo**

SKILLS

ML Algorithm	**Python, Pytorch, Pytorch3D, Keras, Tensorflow**
ML Efficiency	**C++, CUDA, NVIDIA DALI, Nsight**
Miscellaneous	**Docker, Bash**
Basic Knowledge	**R, Node.js, JavaScript, MongoDB, mySQL, Scala, Kotlin**

SOFTWARE ARTIFACTS

FixNoise   **LeeDongYeun/FixNoise**

Pytorch implementation of FixNoise.

Deepfake Detection Framework   **LeeDongYeun/deepfake-detection**

Basic model training and datasets processing code for Deepfake Detection.

Keras M2Det   **LeeDongYeun/keras-m2det**

Keras implementation of *M2Det: A Single-Shot Object Detector based on Multi-Level Feature Pyramid Network*.

HONERS AND AWARDS

Jun. 2022	**Best Paper Award**	**Sponsored by Google**
	CVPR Workshops on AI for Content Creation.	