Cheeun Hong

Ph.D. Candidate
Dept. of Electrical and Computer Engineering, Seoul National University

✉ cheeun914@snu.ac.kr
🌐 https://cheeunhong.github.io
⬛ https://github.com/Cheeun
Ⓖ link

RESEARCH INTERESTS

I am passionate about advancing **efficient AI** to optimize both model training and inference, with the ultimate goal of promoting sustainable AI. My research focuses on developing cutting-edge techniques like **network quantization**, **pruning**, and **test-time adaptation**, aimed at drastically reducing computational costs while maintaining high performance. I have developed efficient algorithms for various vision tasks like image restoration and video generation. My broader goal is to compress large-scale, computationally intensive models—including vision-language and generative models—to move closer to achieving **on-device AI**.

Keywords: Efficient AI, On-device AI

EDUCATION

Seoul National University – Seoul, Korea
Integrated Ph.D. in Electrical and Computer Engineering, Mar. 2020 - Present
Advisor: Prof. Kyoung Mu Lee

Seoul National University – Seoul, Korea
B.S. in Electrical and Computer Engineering, Mar. 2015 - Feb. 2020

University of Applied Sciences and Arts Northwestern Switzerland – Switzerland
Exchange Student in Computer Science, Fall 2017

INTERNSHIP

Meta SuperIntelligence Labs (MSL) – Meta, Switzerland
Research Scientist Intern, Jun. 2025 - Dec. 2025
Working on post-training for efficient video generation models

Machine Intelligence and Pattern Analysis Lab (MIPAL) – Seoul National University, Korea
Student Intern, Jun. 2019 - Aug. 2019
Mentor: Prof. Nojun Kwak

DRAM circuit design team – SK Hynix, Korea
Engineering Intern, Jun. 2018 - Aug. 2018

SELECTED PUBLICATIONS

[International Conferences]

Diversity, Plausibility, and Difficulty: Dynamic Data-Free Quantization

Cheeun Hong*, Sungyong Baik*, Junghun Oh, and Kyoung Mu Lee, In Winter Conference on Applications of Computer Vision (**WACV**), 2025.

Overcoming Distribution Mismatch in Quantizing Image Super-Resolution Networks

Cheeun Hong and Kyoung Mu Lee, In European Conference on Computer Vision (**ECCV**), 2024.

AdaBM: On-the-Fly Adaptive Bit Mapping for Image Super-Resolution

Cheeun Hong and Kyoung Mu Lee, In Conference on Computer Vision and Pattern Recognition (**CVPR**), 2024.

Content-Aware Dynamic Quantization for Image Super-Resolution

Cheeun Hong, Sungyong Baik, Heewon Kim, Seungjun Nah, and Kyoung Mu Lee, In European Conference on Computer Vision (**ECCV**), 2022.

Attentive Fine-Grained Structured Sparsity for Image Restoration

Junghun Oh, Heewon Kim, Seungjun Nah, Cheeun Hong, Jonghyun Choi, and Kyoung Mu Lee, In Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.

DAQ: Channel-Wise Distribution-Aware Quantization for Deep Image Super-Resolution Networks

Cheeun Hong*, Heewon Kim*, Sungyong Baik, Junghun Oh, and Kyoung Mu Lee, In Winter Conference on Applications of Computer Vision (**WACV**), 2022.

Batch Normalization Tells You Which Filter is Important

Junghun Oh, Heewon Kim, Sungyong Baik, Cheeun Hong, and Kyoung Mu Lee, In Winter Conference on Applications of Computer Vision (**WACV**), 2022.

[Journals]

CoLaNet: Adaptive Context and Latent Information Blending for Face Image Inpainting

JoonKyu Park, Cheeun Hong, Sungyong Baik, and Kyoung Mu Lee, IEEE Signal Processing Letters, 2023.

ACADEMIC EXPERIENCES

• Served as a reviewer for **CVPR** (2022, 2023, 2024, 2025), **ICCV** (2023), **ECCV** (2022, 2024), **TNNLS**
• Transferred technology **Fast Deep Super-Resolution Algorithm**, SNU R&DB, 2021

AWARDS & HONORS

• **Youlchon AI Star Scholarship** (~ $6000)	2024
• **Best Paper Award at IPIU 2021** (33rd Workshop on Image Processing and Image Understanding)	2021
• **The Grand Prize at Hynix Internship Program**	2018

TALKS

• **AIIS Fall Retreat, SNU** ("Content-Aware Dynamic Quantization for Image Super-Resolution")   2022

Teaching Experience

Seoul National University

Teaching Assistant in *Recent Trends in Computer Vision, Spring 2022*
Teaching Assistant in *Introduction to Computer Vision, Spring 2022*

REFERENCES

Advisor   **Kyoung Mu Lee**
            Professor
            Seoul National University
            kyoungmu@snu.ac.kr
            https://cv.snu.ac.kr/index.php/kmlee