

Jeimin Jeon

PH.D. STUDENT · COMPUTER VISION LAB, YONSEI UNIVERSITY

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Research Interests

- **Efficient Deep Learning:** Quantization, Neural Architecture Search (NAS)
- **Large-Scale Generative Models:** Diffusion Transformers, Diffusion LLMs
- **Agentic AI**

Education

Yonsei University

PH.D. IN ELECTRICAL AND ELECTRONIC ENGINEERING (ADVISOR: PROF. BUMSUB HAM)

Seoul, South Korea

Mar. 2022 - Present

Yonsei University

B.S. IN ELECTRICAL AND ELECTRONIC ENGINEERING (MAGNA CUM LAUDE, TOP 3%)

GPA: 4.01 / 4.3

Seoul, South Korea

Mar. 2016 - Feb. 2022

Publications

∗: equal contribution

Fine-Grained Credit Assignment for Agent Architecture Search

2026

Jeimin Jeon, Hyeonwoo Cho, and Bumsub Ham

Under Review

Perturbing Text Attention for Guiding Diffusion Models

2026

Byunggwon Son, Jeimin Jeon, Hyeonwoo Cho, and Bumsub Ham

Under Review

Global Context Guidance for Diffusion Large Language Models

2026

Jeimin Jeon and Bumsub Ham

Conference on Neural Information Processing Systems (NeurIPS)

TAS-LoRA: Transformer Architecture Search with Mixture-of-LoRA Experts

2026

Jeimin Jeon, Hyunju Lee, and Bumsub Ham

IEEE Computer Vision and Pattern Recognition (CVPR)

Relational Feature Caching for Accelerating Diffusion Transformers

2026

Byunggwon Son[∗], Jeimin Jeon[∗], Jeongwoo Choi[∗], and Bumsub Ham

International Conference on Learning Representations (ICLR)

GrowTAS: Progressive Expansion from Small to Large Subnets for Efficient ViT Architecture Search

2026

Hyunju Lee, Youngmin Oh, Jeimin Jeon, Donghyeon Baek, and Bumsub Ham

IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)

AccuQuant: Simulating Multiple Denoising Steps for Quantizing Diffusion Models

2025

Seunghoon Lee, Jeongwoo Choi, Byunggwon Son, Jaehyeon Moon, Jeimin Jeon, Bumsub Ham

Conference on Neural Information Processing Systems (NeurIPS)

Token-Based Dynamic Bit-Width Assignment for ViT Quantization

2025

Dohyung Kim[∗], Jaehyeon Moon[∗], Junghyup Lee, Geon Lee, Jeimin Jeon, Bumsub Ham

Pattern Recognition (PR)

Scheduling Weight Transitions for Quantization-Aware Training

2025

Junghyup Lee*, Jeimin Jeon*, Dohyung Kim, and Bumsub Ham

[IEEE International Conference on Computer Vision \(ICCV\)](#)

Subnet-Aware Dynamic Supernet Training for Neural Architecture Search

2025

Jeimin Jeon, Youngmin Oh, Junghyup Lee, Donghyeon Baek, Dohyung Kim, Chanho Eom, and Bumsub Ham

[IEEE Computer Vision and Pattern Recognition \(CVPR\)](#)

Toward INT4 Fixed-Point Training via Exploring Quantization Error for Gradients

2024

Dohyung Kim, Junghyup Lee, Jeimin Jeon, Jaehyeon Moon, and Bumsub Ham

[European Conference on Computer Vision \(ECCV\)](#)

Awards

2026 **Silver Prize**, 32nd Samsung Humantech Paper Award

[Samsung Electronics](#)

Experience

Articron

[Seoul, South Korea](#)

RESEARCHER

[Aug. 2023 - Present](#)

- Developed quantization and pruning algorithms for CIM-based NPUs across diverse model families, including CNNs, LLMs, and audio models, in close collaboration with hardware teams.
- Built deep learning methods for circuit performance prediction and design optimization.

Patents

INTERNATIONAL

Aug. 2024 **Application**, Dynamic Supernet Learning Apparatus and Method for Neural Architecture Search

[US18799660](#)

DOMESTIC

Apr. 2026 **Registration**, Quantization-Aware Training Apparatus and Method

[10-2953461](#)

May 2026 **Application**, Subnet Training Method and Apparatus Using Mixture-of-LoRA Experts for Transformer Architecture Search

[10-2026-0082152](#)

Oct. 2024 **Application**, Apparatus and Method for Quantizing Tokens of Vision Transformers

[10-2024-0137421](#)

Jul. 2024 **Application**, Dynamic Supernet Learning Apparatus and Method for Neural Architecture Search

[10-2024-0100942](#)

Sep. 2023 **Application**, Quantization Apparatus and Method for Artificial Neural Network

[10-2023-0116857](#)

Services

Peer-review

IJCV, CVPR (2024, 2025, 2026), NeurIPS (2025, 2026), ECCV (2024)

Teaching

Deep Learning Lab, Digital Image Processing, Electrical Engineering 101, SW Programming