Junhyuk So

Google Scholar

**EDUCATION** 

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# M.S/Ph.D - POSTECH (Advisor : Eunhyeok Park) Department of Computer Science and Enginnering

Pohang, Korea 2022 - Present

B.S - University Of Seoul

Seoul, Korea 2018 - 2022

Department of Electrical and Computer Engineering

## RESEARCH INTERESTS

• Machine Learning generative model, multimodal learning

• Efficient AI quantization, neural architecture search, parallel inference

• Computer System GPU kernel design, neural network accelerator

# **PUBLICIATIONS**

[·] ML/AI top-tier conference, \* co-first author

## Conference

#### 2025

- [ICCV25] Junhyuk So, Junhyuk So, Juncheol Shin, Hyunho Kook, Eunhyeok Park, "Grouped Speculative Decoding for Autoregressive Image Generation", ICCV International Conference on Computer Vision, Oct, 2025
- [CVPR25] Junhyuk So, Jiwoong Shin, Chaeyeon Jang, Eunhyeok Park, "PCM: Picard Consistency Model for Fast Parallel Sampling of Diffusion Models", CVPR The IEEE/CVF Conference on Computer Vision and Pattern Recognition, June, 2025

#### 2024

• [ECCV24] Junhyuk So\*, Jungwon Lee\*, Eunhyeok Park, "FRDiff: Feature Reuse for Universal Training-free Acceleration of Diffusion Models", ECCV The 18th European Conference on Computer Vision, Oct, 2024

#### 2023

- [NeurIPS23] Junhyuk So\*, Jungwon Lee\*, Daehyun Ahn, Hyungjun Kim, Eunhyeok Park, "Temporal Dynamic Quantization for Diffusion Models" NeurIPS 37th Conference on Neural Information Processing Systems, Dec, 2023
- [NeurIPS23] Junhyuk So\*, Changdae Oh\*, Yongtaek Lim, Hoyoon Byun, Minchul Shin, Kyungwoo Song, "Geodesic Multi-Modal Mixup for Robust Fine-Tuning" NeurIPS 37th Conference on Neural Information Processing Systems, Dec, 2023
- [CVPR23] Juncheol Shin\*, Junhyuk So\*, Sein Park, Seungyeop Kang, Sungjoo Yoo, Eunhyeok Park, "NIPQ: Noise porxy based Integraded Psuedo Quantization" IEEE/CVF CVPR Computer Vision and Pattern Recognition Conference, June, 2023
- Eunchong Noh, **Junhyuk So**, Seunghwan Lee, "Machine-Learning based Optimal Design of a Wireless Power Transfer Coil for Battery-Powered Tram" ICPE 2023-**ECCE Asia** 11th International Conference on Power Electronics, May, 2023

# 2022

 Changdae Oh, Heeji Won, Junhyuk So, Taero Kim, Yewon Kim, Hosik Choi, Kyungwoo Song, "Learning Fair Representation via Distributional Contrastive Disentanglement" ACM SIGKDD International Conference on Knowledge Discovery Data Mining. July, 2022 (https://dl.acm.org/doi/10.1145/3534678.3539232)

## 2021

• [CODES21] Chanyoung Oh\*, Junhyuk So\*, Sumin Kim\*, Youngmin Yi, "Exploiting Activation Sparsity for Fast CNN Inference on Mobile GPUs" International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS) Oct, 2021 (https://dl.acm.org/doi/abs/10.1145/3477008)

# JOURNAL [SCI]

#### 2023

• Junhyuk So, Yongtaek Lim, Yewon Kim, Changdae Oh, Kyungwoo Song, "Robust Contrastive Learning With Dynamic Mixed Margin" IEEE Access June, 2023 (https://ieeexplore.ieee.org/abstract/document/10154052)

# 2021

• Chanyoung Oh\*, **Junhyuk So\***, Sumin Kim\*, Youngmin Yi, "Exploiting Activation Sparsity for Fast CNN Inference on Mobile GPUs" ACM Transactions on Embedded Computing Systems (**TECS**) Oct, 2021 (https://dl.acm.org/doi/abs/10.1145/3477008)

# ACADEMIC SERVICES

• Reviewer - NeurIPS24-25, CVPR24-25, AAAI24, ICLR25

# AWARDS

- Participation Award in Junior Student track, Korea Software Congress, Korea (Dec. 2020)
- First Prize in Research Sharing Contest, University Of Seoul, Korea (Dec. 2020)

#### TALKS

• Recent Topics on Image Generation Acceleration @ Squeezebits (June, 2025)

# SKILLS

- Deep Learning, Machine Learning
- Pytorch, CUDA
- Python, C/C++, JAVA

## Misc

 $\bullet$  Homepage : https://junhyukso.github.io