Junhyuk So

Google Scholar

Email: junhyukso@postech.ac.kr
Mobile: +8210-2845-4886

Education

- **M.S/Ph.D - POSTECH (Advisor : Eunhyeok Park)** — Pohang, Korea
  Department of Computer Science and Enginnering — *2022 - Present*
- **B.S - University Of Seoul** — Seoul, Korea
  Department of Electrical and Computer Engineering — *2018 - 2022*

Research Interests

- **Efficient AI** quantization, pruning, neural architecture search
- **Machine Learning** generative model, multimodal learning, representation learning
- **Computer System** GPU kernel design, neural network accelerator, computer systems

Publiciations

*** co-first author**, [*] First-authored top-tier conference

Conference

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)

Journal [Domestic]

2020

- 김도희, 이상헌, 정세환, **소준혁**, 이영민, "CCTV 영상에서 얼굴인식과 사람 재식별을 이용한 확진자 고속 검색 시스템(Fast Confirmed Case Search System using Face Recognition and Person Re-identification in CCTV Video)", 한국정보과학회(KSC) 학술발표논문집 pp.1572-1574. Dec, 2020 (https://www.dbpia.co.kr/Journal/articleDetail?nodeId=NODE10530078)

Academic Services

- Reviewer - NeurIPS24, CVPR24, 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)

Skills

- Python, C/C++, Javascript, Java
- CUDA, OpenCL
- Pytorch, Tensorflow
- React, React Native, Android

Misc

- Homepage : https://junhyukso.github.io