Jaehyeon Moon

Yonsei University

Combined M.S. & Ph.D. student

Email	jhmn@yonsei.ac.kr
Website	https://jaehyeonmoon.github.io/
Location	50, Yonsei-ro, Seodaemun-gu, Seoul, Korea, 03722

Research Interests

- Deep learning models
- Network compression

Education

Mar. 2020 – Present	**Yonsei University** *School of Electrical and Electronic Engineering* *Seoul, Korea* Advisor: Bumsub Ham Combined M.S. & Ph.D. student
Mar. 2016 – Feb. 2020	**Yonsei University** *School of Electrical and Electronic Engineering* *Seoul, Korea* B.S. in Electrical and Electronic Engineering GPA: 4.06 / 4.30 (Magna Cum Laude)

Publications

- **Jaehyeon Moon** and Bumsub Ham, "Shift-and-Sum Quantization for Visual Autoregressive Models", ICLR, 2026.

- Dohyung Kim*, **Jaehyeon Moon***, Junghyup Lee, Geon Lee, Jeimin Jeon, and Bumsub Ham, "Token-Based Dynamic Bit-Width Assignment for ViT Quantization", Pattern Recognition, 2026. *Equal contribution.

- **Jaehyeon Moon**, Dohyung Kim, Junyong Cheon, and Bumsub Ham, "Instance-Aware Group Quantization for Vision Transformers", CVPR, 2024.

- Seunghoon Lee*, Jeongwoo Choi*, Byunggwan Son, **Jaehyeon Moon**, Jeimin Jeon, and Bumsub Ham, "AccuQuant: Simulating Multiple Denoising steps for Quantizing Diffusion Models", NeurIPS, 2025. *Equal contribution.

- Dohyung Kim, Junghyup Lee, Jeimin Jeon, **Jaehyeon Moon**, and Bumsub Ham, "Toward INT4 Fixed-Point Training via Exploring Quantization Error for Gradients", ECCV, 2024.

Experiences

Aug. 2023 – Present	**TIPS project** *Research engineer, Articron* Developed pruning and quantization algorithms to deploy deep neural networks on compute-in-memory (CIM) chips under the TIPS startup R&D program

Patents

- 함범섭, **문재현**, 김도형, 전준용, "인공 신경망을 위한 양자화 장치와 방법 및 이를 구비하는 이미지 처리 장치", US, 18/456,020

- 함범섭, 김도형, 이중협, **문재현**, 이건, 전제민, "비전 트랜스포머를 위한 토큰 양자화 장치 및 방법", KR-Application No. 10-2024-0137421

- 함범섭, 김도형, 이중협, 전제민, **문재현**, "인공 신경망을 위한 양자화 장치 및 방법", KR-Application No. 10-2023-0116857

- 함범섭, **문재현**, 김도형, 전준용, "인공 신경망을 위한 양자화 장치와 방법 및 이를 구비하는 이미지 처리 장치", KR-Application No. 10-2023-0072090

Awards & Scholarships

- 국가우수장학금(이공계), 과학기술정보통신부, Republic of Korea (Sep. 2018 – Feb. 2020)