

Woo Kyoung Han

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EDUCATION

Bachelor of Engineering:

Soongsil University

(Mar 2016 ~ Feb 2022)

- Major in electronic information engineering
- 4.13/4.5 GPA (Top 10% of the program)

Master of Engineering:

Daegu Gyeongbuk Institute of Science & Technology (DGIST)

(Mar 2022 ~ Feb 2024)

- Major in electrical engineering and computer science
- 4.00/4.30 GPA
- Advisor: Kyong Hwan Jin & Sunghoon Im

Doctor of Engineering:

Korea University

(Mar 2024 ~ Present)

- Major in electrical engineering (Signal Processing and Multimedia)
- 4.33/4.50 GPA
- Advisor: Kyong Hwan Jin

PUBLICATION

W. K. Han, B. Lee, S. H. Park and K. H. Jin "ABCD: Arbitrary Bitwise Coefficient for De-Quantization." *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023

M. Kim, Y. Lee, **W. K. Han** and K. H. Jin "Learning Residual Elastic Warps for Image Stitching under Dirichlet Boundary Condition" *IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)*, 2024

W. K. Han, S. Im, J. Kim and K. H. Jin "JDEC: JPEG Decoding via Enhanced Continuous Cosine Coefficients." *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024

D. G. Choi, J. Lee, J. Koo, **W. K. Han**, D. Park, J. Kung, J. Lee, J. H. Yoon "A 65nm 687.5-TOPS/W Drive Strength-based SRAM Compute-In-Memory Macro with Adaptive Dynamic Range for Edge AI applications" *IEEE Asian Solid-State Circuits Conference (A-SSCC)*, 2024

W. K. Han, B. Lee, H. Cho, S. Im, K. H. Jin "Towards Lossless Implicit Neural Representation via Bit Plane Decomposition" *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2025

GRANTS

Merit-based Scholarship (Soongsil University) (2016, 2017, 2018, 2020)

Merit-based Scholarship (Korea University) (2024)

Ph.D. Candidate Fellowship (from the National Research Foundation of Korea) (2024~2026)

WORK & RESEARCH EXPERIENCE

Teaching Assistant (2018 ~ 2024)

- Subjects: Electromagnetism, Circuit Theory, Fundamental Signal Processing, Linear Algebra, Advanced Programming, Engineering Mathematics

Research Assistant (2022 ~ Present)

- Platform development for the police health Management (Supported by National Police Agency of Korea)
- Charge in data compression and distorted data recovery

AWARDS

IEEE Seoul Section Best Students Award – Gold (2023)

Workshop On Image Processing and Image Understanding – Encouragement Prize (2024)

IEIE Summer Annual Conference – Best Student Paper (2024)

Workshop On Image Processing and Image Understanding – Bronze Prize (2025)

PATENTS

Korea patent publication

- System for B-Spline Texture Coefficient Estimation and Method for Generating High-Resolution Images Using the Same (2023)
- Apparatus and Method of Recovering Image Using Arbitrary Bitwise Coefficient Estimation for De-quantization (2023)
- Lossless implicit neural representation via object signal quantization and bitwise decomposition (2024)