

Daeun Kim

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Contact Information

School of Computing, KAIST, 291 Daehak-ro, Yuseong-gu, Daejeon, South Korea, 34141

Research Interests

- Computer architecture
- Generative AI system
- HW/SW Co-design

Education

KAIST, Ph.D. in School of computing Mar. 2025 – date
• Advisor: Prof. Jongse Park
KAIST, M.S. in School of computing Mar. 2023 – Feb. 2025
• Advisor: Prof. Jongse Park
• Thesis: Exploiting MX Quantization for Accelerating Diffusion Transformer-based Image Generative Model Inference
KAIST, B.S. in School of computing Mar. 2018 – Feb. 2023

Publications

Déjà Vu: Efficient Video-Language Query Engine with Learning-based Inter-Frame Computation Reuse Sep. 2025
Jinwoo Hwang, **Daeun Kim**, Sangyeop Lee, Yoonsung Kim, Guseul Heo, Hojoon Kim, Yunseok Jeong, Tadiwos Meaza, Eunhyeok Park, Jeongseob Ahn, Jongse Park
VLDB 2025
MixDiT: Accelerating Image Diffusion Transformer Inference with Mixed-Precision MX Quantization Apr. 2025
Daeun Kim, Jinwoo Hwang, Changhun Oh, Jongse Park
IEEE Computer Architecture Letters (CAL)
CoVA: Exploiting Compressed-Domain Analysis to Accelerate Video Analytics Jun. 2022
Jinwoo Hwang, Minsu Kim, **Daeun Kim**, Seungho Nam, Yoonsung Kim, Dohee Kim, Hardik Sharma, Jongse Park
USENIX ATC 2022

Experiences

Undergrad Architecture Mentoring (uArch) Workshop mentee, ISCA 2025 Jun. 2023
Undergraduate research intern, KAIST CASys Lab Sep. 2021 - Feb. 2023
AI engineer internship, Naviworks Co.,Ltd. Mar. 2021 - Aug. 2021

Teaching Assistant

KAIST CS230: System Programming Fall 2022

References

Jongse Park jspark@casys.kaist.ac.kr
Professor, KAIST