Minsu Kim

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# **Education**

## 2017 - 2021 B.S. in Computer Science. KAIST

## 2021 - 2023 M.S. in Computer Science. KAIST

Advised by Prof. Jongse Park

## 2023 - Current Ph.D. in Computer Science. KAIST

Advised by Prof. Jongse Park

# **Experience**

## July 2023 - August 2024 Intern, Software Developer

### HyperAccel

Developed software stack and compiler for LLM inference accelerator.

# **Publication**

* J. Hwang, M. Kim, D. Kim, S. Nam, Y. Kim, D. Kim, H. Sharma, J. Park, “CoVA: Exploiting Compressed-Domain Analysis to Accelerate Video Analytics” in USENIX Annual Technical Conference (ATC), July 2022.
* M. Kim, J. Hwang, G. Heo, S. Cho, D. Mahajan, J. Park, “Accelerating String-key Learned Index Structures via Memoization-based Incremental Training” in International Conference on Very Large Databases (VLDB), August 2024.
* J. Cho, M. Kim, H. Choi, G. Heo, J. Park, “LLMServingSim: A HW/SW Co-Simulation Infrastructure for LLM Inference Serving Systems at Scale” in IEEE International Symposium on Workload Characterization (IISWC), September 2024.
* S. Moon, J. Kim, J. Kim, S. Hong, J. Cha, M. Kim, S. Lim, G. Choi, D. Seo, J. Kim, H. Lee, H. Park, R. Ko, S. Choi, J. Park, J. Lee, J. Kim, “LPU: A Latency-optimized and Highly Scalable Processor for Large Language Model Inference” in IEEE Micro, special issue on Contemporary Industry Products, 2024.
* M. Kim\*, S. Hong\*, R. Ko, S. Choi, H. Lee, J. Kim, J. Kim, J. Park, “Oaken: Fast and Efficient LLM Serving with Online-Offline Hybrid KV Cache Quantization”, in International Symposium on Computer Architecture (ISCA), June 2025.

*\*: Equal contribution*

# **Award**

* Best Paper Award & Distinguished Artifact Award

At IISWC 2024, “LLMServingSim: A HW/SW Co-Simulation Infrastructure for LLM Inference Serving Systems at Scale”

* Best Paper Award

At KAIST, “Accelerating String-key Learned Index Structures via Memoization-based Incremental Training”

# **SKILLS**

Programming Languages: Python, C, C++, Chisel, SystemVerilog

Technologies: Linux, PyTorch, Triton

# **Teaching Assistant**

KAIST CS230: System Programming 2021 Fall

KAIST CS311: Computer Organization 2022 Spring

KAIST CS510: Computer Architecture 2023 Spring

KAIST CS311: Computer Organization 2024 Spring

KAIST CS230: System Programming 2024 Fall

# **Reference**

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