Dohyun Park

+1 (217) 721-3931 (cell)
dohyunp2@illinois.edu

INTERESTS	Data Management; Machine Learning; Distributed Systems

EDUCATION

University of Illinois at Urbana-Champaign   August 2023 – Present
Ph.D. in Computer Science
- Advisor: Yongjoo Park

Korea University   March 2017 – February 2023
B.S. in Electrical Engineering

PUBLICATIONS

UPP: Universal Predicate Pushdown to Smart Storage
Ipoom Jeong, Jinghan Huang, Chuxuan Hu, **Dohyun Park**, Jaeyoung Kang, Nam Sung Kim, Yongjoo Park
ISCA 2025

Enabling In-Vitro Serverless Systems Research
Dmitrii Ustiugov, **Dohyun Park**, Lazar Cvetković, Mihajlo Djokic, Hongyu Hè, Boris Grot, Ana Klimovic
WORDS at SOSP 2023

RESEARCH

AirDB: Runtime for Fast On-Storage Transactions
Dohyun Park, Wenjie Hu, Xiangyao Yu, Mahesh Balakrishnan, Yongjoo Park
In preparation for NSDI'26

Fast LLM-Based Embedding for Efficient Retrieval-Augmented Generation (RAG)
In preparation

SERVICE

Availability & Reproducibility Initiative Reviewer   SIGMOD 2024

Artifact Evaluation Committee Member   HPCA 2024

RESEARCH EXPERIENCE

UIUC CreateLab Research Assistant   August 2023 – Present
Advisor: Prof. Yongjoo Park

Google Student Researcher   January – May 2025
Database/Analytics Efficiency & Codesign

ETH Student Summer Research Fellow   July – August 2022
Advisor: Prof. Ana Klimovic

WORK EXPERIENCE

Bucketplace   January 2020 – March 2022
Software Engineer (Fulfilled Mandatory Military Service Duty)
- Maintained data pipeline using Airflow, Hadoop, Spark on AWS
- Built and maintained real-time user action data pipelines using Go, Kafka, and Spark on AWS
- Designed and built a microservice-based search system (Go, gRPC, Elasticsearch, Kubernetes)

OTHER EXPERIENCE

Korea University Creative Challenger Program
Advisor: Prof. Sang Hyun Lee
- Led a project to develop an autonomous campus delivery robot
- Experimented with traveling salesman problem algorithms for route optimization

- Built a prototype using Raspberry Pi, OpenCV-based pathfinding, and GPS

Embedded Software Contest
- Programmed a humanoid robot to perform mock rescue tasks
- Implemented robot movements, pathfinding, and task logic with OpenCV on a Raspberry Pi
- Achieved 2nd place in qualifiers and placed 4th in the 2018 finals; 3rd in 2019