

YOUNGRAE KIM

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youngrae.kim@kaist.ac.kr

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Mar.2022 - Present

M.S. in School of Computing

Cumulative GPA: 3.66/4.3 (3.62/4.0)

Advisor: Prof. Dongman Lee

Hongik University

Mar.2016 - Feb.2022

B.S. in Computer Engineering

Cumulative GPA: 4.01/4.5 (3.73/4.0) (Ranked top 5%)

Major GPA: 3.85/4.0

Advisor: Prof. Young Yoon

RESEARCH INTERESTS

My research centers on enhancing data efficiency through techniques like few-shot and self-supervised learning, and I'm interested in developing versatile general-purpose models with strong, generalized representations for a wide array of tasks.

Keywords: Computer Vision, Data Efficiency, General Purpose Vision Model

PUBLICATIONS

Disentangled Video Representation Learning

On going

MetaWeather: Few-Shot Weather-Degraded Image Restoration via Degradation Pattern Matching

Youngrae Kim*, Younggeol Cho*, and Dongman Lee

[\[Link\]](#)

arxiv, AAAI 2024 submitted

Efficient Reference-based Video Super-Resolution (ERVSR): Single Reference Image Is All You Need

Youngrae Kim*, Hoonhee Cho*, Jinsu Lim*, Minji Lee*, Ho-Jin Choi, Kuk-Jin Yoon, and Dongman Lee

[\[Link\]](#)

2023 IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)

Zone-Agnostic Greedy Taxi Dispatch Algorithm Based on Contextual Matching Matrix for Efficient Maximization of Revenue and Profit

[\[Link\]](#)

Youngrae Kim, Young Yoon

2021 MDPI Electronics

WORK EXPERIENCES

Collaborative Distributed System and Network Lab, KAIST

Mar.2022 - Present

Research on efficient and agile AI-centric system in real-world environments

Application Platform, Hongik University

Jul.2020 - Dec.2021

Research on taxi dispatching system

PROJECTS

Mobility Operating System

Video analysis for preventing traffic accidents by monitoring road conditions with vision sensors

Smart City

Research on taxi dispatching based on Deep Reinforcement Learning

HONORS AND AWARDS

National Scholarship for Science and Engineering	Mar.2022 - Present
Korea Government	
Best TA Award	Feb.2023
Data Structure (CS206) course, School of Computing, KAIST	
Academic Scholarships	Mar.2016 - Feb.2022
Hongik University	

TEACHING EXPERIENCE

Teaching Assistant	Fall 2022
Data Structure (CS206) course, School of Computing, KAIST	
Teaching Assistant	Spring 2022
Operating System (CS330) course, School of Computing, KAIST	

SKILLS

Programming Languages	Python, C/C++, JAVA, Verilog
Frameworks	PyTorch, Docker, Triton Inference Server, gRPC

REFERENCES

Dr. Dongman Lee

Professor of School of Computing at KAIST, Vice President of KAIST, **Email:** dlee@kaist.ac.kr

Dr. Jinwoo Choi

Assistant Professor of Science and Engineering at Kyung Hee University, **Email:** jinwoochoi@khu.ac.kr

Dr. Seunghoon Hong

Assistant Professor of School of Computing at KAIST, **Email:** seunghoon.hong@kaist.ac.kr

Dr. Young Yoon

Associate Professor of Science and Engineering at Hongik University, **Email:** young.yoon@hongik.ac.kr