YOUNGRAE KIM

+82 10-8242-3322 ◇ Daejeon, South Korea
mail: youngrae.kim@kaist.ac.kr ◇ website link

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: 4.2/4.5 (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. Recently, 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
Data-efficient knowledge transfer to improve the performance of vision applications

Future Mobility Service Operation based on AI
Research on taxi dispatching system

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