

YOUNGRAE KIM

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EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) M.S. in School of Computing Cumulative GPA: 3.66/4.3 (3.62/4.0) Advisor: Prof. Dongman Lee	Mar.2022 - Present
Hongik University 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	Mar.2016 - Feb.2022

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 Research on efficient and agile AI-centric system in real-world environments	Mar.2022 - Present
Application Platform, Hongik University Research on mobility application system	Jul.2020 - Dec.2021

PROJECTS

Mobility Operating System
Research on data-efficient knowledge transfer on image restoration

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

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Dr. Jinwoo Choi

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

Dr. Seunghoon Hong

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Dr. Young Yoon

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