

Doyeon

Kim

AI Researcher

Doyeon Kim

I am an AI researcher at Hyundai Motors Institute of Advanced Technology Development (IATD). Before this, I received my Ph.D. degree from Korea Advanced Institute of Science and Technology (KAIST) advised by Professor [Junmo Kim](#).

Email: doken111@gmail.com
[\[Google Scholar\]](#) [\[Website\]](#) [\[Github\]](#)

(updated by 2024.02)

Research Interest

Deep Learning, Autonomous Driving, Generative Models

Experience

Hyundai Motors Institute of Advanced Technology Development (IATD) / AI Researcher
May 2023 - Current

Education

KAIST / Ph.D. in Electrical Engineering
2018 - 2023 / Daejeon, Korea
GPA: 3.82/4.3

KAIST / M.S. in Robotics Program
2016 - 2018 / Daejeon, Korea

Korea University / B.S. in Computer Science and Engineering
2012 - 2016 / Seoul, Korea
GPA: 3.82/4.5 (Major GPA: 4.1/4.5)

Publications

International

Training Cartoonization Network without Cartoon

Doyeon Kim, Dongyeun Lee, Donggyu Joo, Junmo Kim
ICIP 2023

Context-Preserving Two-Stage Video Domain Translation for Portrait Stylization

Doyeon Kim, Eunji Ko, Hyunsu Kim, Junho Kim, Yunji Kim,
Dongchan Min, Junmo Kim, Sung Ju Hwang
CVPR Workshop 2023 (AI for Content Creation)

Fix the Noise: Disentangling Source Feature for Transfer Learning of StyleGAN

Dongyeon Lee, Jae Young Lee, Doyeon Kim, Jaehyun Choi,
Junmo Kim
CVPR 2023 (extended version of CVPRW 2022)

Fix the Noise: Disentangling Source Feature for Transfer Learning of StyleGAN

Dongyeon Lee, Jae Young Lee, Doyeon Kim, Jaehyun Choi,
Junmo Kim
CVPR Workshop 2022 (AI for Content Creation) **Best Paper Award**
[\[paper\]](#) [\[code\]](#)

Linear Combination Approximation of Feature for Channel Pruning

Donggyu Joo, Doyeon Kim, Eojindl Yi, Junmo Kim
CVPR Workshop 2022 (Efficient Deep Learning for Computer Vision) [\[paper\]](#)

Global-Local Path Networks for Monocular Depth Estimation with Vertical CutDepth

Doyeon Kim, Woonghyun Ga, Pyungwhan Ahn, Donggyu Joo,
Sehwan Chun, Junmo Kim
Arxiv preprint [\[paper\]](#) [\[code\]](#)

TricubeNet: 2D Kernel-Based Object Representation for Weakly-Occluded Oriented Object Detection

Beomyoung Kim, Sihaeng Lee, Janghyeon Lee, Doyeon Kim,
Junmo Kim
WACV 2021 [\[paper\]](#)

Progressive Seed Generation Auto-encoder for Unsupervised Point Cloud Learning

Juyoung Yang, Pyungwhan Ahn, Doyeon Kim, Haeil Lee, Junmo Kim
ICCV 2021 [\[paper\]](#)

Delivering Meaningful Representation for Monocular Depth Estimation

Doyeon Kim, Donggyu Joo, Junmo Kim
ICPR 2020 [\[paper\]](#)

Slimming ResNet by Slimming Shortcut

Donggyu Joo, Doyeon Kim, Junmo Kim
ICPR 2020 [\[paper\]](#)

TiVGAN: Text to Image to Video Generation With Step-by-Step Evolutionary Generator

Doyeon Kim*, Donggyu Joo*, Junmo Kim (* indicates equal contribution)
Access 2020 [\[paper\]](#)

Leveraging Contextual Information for Monocular Depth Estimation

Doyeon Kim, Sihaeng Lee, Janghyeon Lee, Junmo Kim
Access 2020 [\[paper\]](#)

Deep Architecture with Cross Guidance between Single Image and Sparse Lidar Data for Depth Completion

Sihaeng Lee, Janghyeon Lee, Doyeon Kim, Junmo Kim
Access 2020 [\[paper\]](#)

Generating a Fusion Image: One's Identity and Another's Shape

Doyeon Kim*, Donggyu Joo*, Junmo Kim (* indicates equal contribution)
CVPR 2018 [\[paper\]](#)

Improved InfoGAN: Generating High Quality Images with Learning Disentangled Representation

Doyeon Kim, Haechang Jung, Jaeyoung Lee, Junmo Kim
RITA 2017

Domestic

Data Synthesis using Convolutional Auto-Encoder

Doyeon Kim, Jeongwoo Ju, Junmo Kim
IPIU 2017

Domestic (KOR)

Device for Generating a Depth Map

Junmo Kim, **Doyeon Kim**, Sihaeng Lee, Janghyeon Lee, Minki Jo
2020-07-24 / 10-2020-0092085

**Deep Learning based Anchor-Free Object Detection using
2D Gaussian Kernel**

Junmo Kim, Beomyoung Kim, Sihaeng Lee, Janghyeon Lee, **Doyeon Kim**, Hayong Woo
2020-07-16 / 10-2020-0088351

**Apparatus for Recognizing Object using Image and Method
Thereof**

Junmo Kim, Sihaeng Lee, Janghyeon Lee, **Doyeon Kim**, Haechang Jung, Younghyun Kim, Minwoo Park, Yangshin Kim
2019-06-17 / 10-2019-0071690

International

Device for Generating a Depth Map (US)

Junmo Kim, **Doyeon Kim**, Sihaeng Lee, Janghyeon Lee, Minki Jo
2021-02-05 / 17169092

**Deep Learning based Anchor-Free Object Detection using
2D Gaussian Kernel (US)**

Junmo Kim, Beomyoung Kim, Sihaeng Lee, Janghyeon Lee, **Doyeon Kim**, Hayong Woo
2020-12-23 / 17132054

**Apparatus for Recognizing Object using Image and Method
Thereof (US)**

Junmo Kim, Sihaeng Lee, Janghyeon Lee, **Doyeon Kim**, Haechang Jung, Younghyun Kim, Minwoo Park, Yangshin Kim
2019-10-14 / 16601217

Apparatus for Recognizing Object using Image and Method Thereof (DE)

Junmo Kim, Sihaeng Lee, Janghyeon Lee, **Doyeon Kim**, Haechang Jung, Younghyun Kim, Minwoo Park, Yangshin Kim

2019-11-18 / 102019131100.4

Languages

Human Language

Korean - Native

English - Advanced Mid

Japanese - Intermediate

Computer Language

Python, C, C++

Deep Learning Framework

PyTorch

Honors and Awards

2018 Samsung Human Tech Award, Silver Prize (\$7,000)

2016 IT Global Leadership Program Scholarship

2015 National Science Scholarship

2014 Honors Scholarship, College of Informatics Alumni Scholarship