# Dongki Jung

95, Jeongjail-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea dongki.jung@naverlabs.com ● jdk9405@gmail.com ● +82-10-6880-2868 ● https://jdk9405.github.io/

# EMPLOYMENT NAVER LABS

■ Spatial AI Engineer
 ■ Robotics Vision Engineer
 ■ Research Intern at Computer Vision Team
 Mar 2022 – Present
 Apr 2021 – Feb 2022
 Sep 2020 – Mar 2021

• Adviser: PhD. Donghwan Lee

# EDUCATION Korea Advanced Institute of Technology (KAIST)

■ M.S. in Electrical Engineering

• Adviser: Prof. Changick Kim

• Cumulative GPA of 3.8 / 4.3

# **Korea University**

■ B.S. in Electrical Engineering

Auxiliary Police (mandatory military service)

• Cumulative GPA of 4.03 / 4.5

Feb 2019 – Feb 2021

Mar 2013 – Feb 2019 May 2014 – Feb 2016

# RESEARCH INTERESTS PUBLICATIONS

3D Reconstruction, Neural Rendering, and SfM

#### INTERNATIONAL CONFERENCES

- [1] Jaehoon Choi, **Dongki Jung**, Taejae Lee, Sangwook Kim, Youngdong Jung, Dinesh Manocha, Donghwan Lee, "TMO: Textured Mesh Acquisition of Objects with a Mobile Device by using Differentiable Rendering," Accepted to *The IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR*), 2023.
- [2] Jaehoon Choi\*, **Dongki Jung\***, Yonghan Lee, Deokhwa Kim, Dinesh Manocha, Donghwan Lee, "SelfTune: Metrically Scaled Monocular Depth Estimation through Self-Supervised Learning," Accepted to *The IEEE International Conference on Robotics and Automation (ICRA*), 2022. (\* These two authors contributed equally)
- [3] **Dongki Jung\***, Jaehoon Choi\*, Yonghan Lee, Deokhwa Kim, Changick Kim, Dinesh Manocha, Donghwan Lee, "DnD: Dense Depth Estimation in Crowded Indoor Dynamic Scenes," Accepted to *IEEE/CVF International Conference on Computer Vision (ICCV)*, 2021. (\* These two authors contributed equally)
- [4] Taekyung Kim, Jaehoon Choi, Seokeon Choi, **Dongki Jung**, Changick Kim, "A Few Depth Points are All You Need for Multi-view Stereo: A Novel Semi-supervised Learning Method for Multi-view Stereo," Accepted to *IEEE/CVF International Conference on Computer Vision (ICCV)*, 2021.
- [5] Jaehoon Choi, **Dongki Jung**, Yonghan Lee, Deokhwa Kim, Dinesh Manocha, and Donghwan Lee, "SelfDeco: Self-Supervised Monocular Depth Completion in Challenging Indoor Environments," Accepted to *The IEEE International Conference on Robotics and Automation (ICRA*), 2021.
- [6] Jaehoon Choi\*, **Dongki Jung\***, Donghwan Lee, Changick Kim, "SAFENet: Self-Supervised Monocular Depth Estimation with Semantic-Aware Feature Extraction," Accepted to *The 34th Annual Conference on Neural Information Processing Systems Workshop (NeurIPSW)*, Vancouver, Canada, 2020. (\* These two authors contributed equally)
- [7] **Dongki Jung**, Seunghan Yang, Jaehoon Choi, and Changick Kim, "Arbitrary Style Transfer Using Graph Instance Normalization," Accepted to *The 27th IEEE International Conference on Image Processing (ICIP)*, Abu Dhabi, UAE, Oct. 22-28, 2020.
- [8] Seunghan Yang, Youngeun Kim, **Dongki Jung**, Changick Kim, "Partial Domain Adaptation Using Graph Convolutional Networks," *arXiv* 2020.

### CHALLENGES INTERNATIONAL CHALLENGES

[1] **3rd place** in the Track 3: City-Scale Multi-Camera Vehicle Tracking at **AI City Challenge** held in *IEEE Conference on Computer Vision and Pattern Recognition* Workshop 2020

# PROJECT EXPERIENCE

■ 3D Object Recognition Algorithm for Autonomous Driving

May 2019 - Nov 2019

- Funded by *LG Electronics Co., Ltd*
- Aimed at Developing the 2D object detection and depth estimation for cross-modality of RGB images and FIR images.
- 3D Object Recognition Algorithm for Indoor Scenes

Jun 2020 - Present

- Funded by **LG Electronics Co., Ltd**
- Aimed at Developing the 2D object detection and depth estimation using FIR images.

# ADDITIONAL ACTIVITIES

■ Research Intern (Adviser: Professor Hanseok Ko)

Mar 2018 - Jun 2018

- Intelligent Signal Processing Laboratory, Korea University
- participated in ATM vandalism action recognition (Funded by *Nautilus HYOSUNG*)
  Aimed at making the ATM vandalism dataset with own annotation and object detection with YOLOv2

**AWARDS** 

- Academic Achievement Award, Korea University, 2016, 2017
- YooJung Scholarship, YooJung Scholarship Foundation, 2017, 2018

**LANGUAGES** 

- Korean: Native language.
- English: Business Level (speaking, reading, writing).
  - TOEIC: 905 / 990

**SKILLS** 

Python, MATLAB, C++, LATEX, PyTorch, TensorFlow,

#### REFERENCES

# ■ Donghwan Lee

Computer Vision Team Leader @ NAVER LABS 95, Jeongjail-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea donghwan.lee@naverlabs.com

# ■ Professor Changick Kim

Professor in School of Electrical Engineering, Korea Advanced Institute of Science and Technology (KAIST) R413, ITC Building, KAIST, Yuseong-gu, Daejeon, Korea changick@kaist.ac.kr ● +82-42-350-7421

[CV compiled on 2023-06-05]