Sunghwan Kim

Website: sunghwan.me Email: ssshwan.korea@gmail.com / suk063@ucsd.edu Mobile: +82-10-4305-1311

Education

University of California, San Diego

PhD Student, Electrical and Computer Engineering

San Diego, CA, USA Sep 2024-Present

Korea Advanced Institute of Science and Technology (KAIST)

Bachelor of Science in Electrical Engineering and Mathematics (double major)

Daejeon, South Korea Mar 2017-Feb 2021

Korea Science Academy of KAIST

Specialized high school for students talented in math and science

Busan, South Korea Mar 2014-Feb 2017

Publications

1. Textual Query-Driven Mask Transformer for Domain Generalized Segmentation [paper]

Byeonghyun Pak*, Byeongju Woo*, <u>Sunghwan Kim</u>*, Dae-hwan Kim, Hoseong Kim European Conference on Computer Vision (ECCV), 2024

2. Texture Learning Domain Randomization for Domain Generalized Segmentation [paper]

Sunghwan Kim, Dae-hwan Kim, Hoseong Kim International Conference on Computer Vision (ICCV), 2023

3. Data Gathering Trials for the Development of Military Imaging Systems [paper]

Maria Niebla, Duncan L. Hickman, Eunjin Koh, Chanyong Lee, Hoseong Kim, Chaehyoen Lim, Sunghwan Kim Proc. SPIE, Electro-Optical and Infrared Systems, 2023

Patent

1. Method and System for Detecting Target Using Time Series Images

Chaehyeon Lim, Sunghwan Kim, Hoseong Kim, Eunjin Koh KR Patent, 2023 (1025640380000)

Employment

Agency for Defense Development (ADD)

First Lieutenant

Daejeon, South Korea

Jun 2021-May 2024

- Selected as one of the 20 officers in Korea dedicated to science and technology research for national defense.
- Developed various defense systems (e.g., UAVs) integrated with ML-based vision models.

Bluepoint Partners

Seoul, South Korea

Research Assistant

Aug 2020-Mar 2021

Conducted market analysis on ongoing investments on robotics and researched overall technological trends.

Neosapience *Machine Learning Engineer*

Seoul, South Korea

Dec 2017-Feb 2018

Constructed an audio and text pair dataset for training Korean text-to-speech models.

Honor

Korea Army Startup Challenge Gold Prize

Oct 2021

Korea Student Aid Foundation (KOSAF) Scholarship

Mar 2020

Korea National Scholarship of Excellence in Science and Technology

Mar 2019-Feb 2021

- Total \$ 20,000 (Full-Ride)

National Scholarship for Undergraduate Study

Mar 2017-Feb 2019

- Total \$13,500 (Full-Tuition)

Skills

Programming Languages: Python, C/C++, JavaScript, MATLAB

Frameworks & Tools: Pytorch, Tensorflow, NumPy, OpenCV, Docker, Git