KU-HYEUN KO

Personal Data

Researcher

Electrical and Computer Engineering (ECE) Research Institute
Ulsan National Institute of Science and Technology (UNIST)
50, UNIST-gil, Ulsan 44919, Republic of Korea

Gender	Male	**Military Service**	Conscripted Firefighters Agency
Mobile	010-8562-2561	**E-mail**	khko@unist.ac.kr
Home page		https://kuhyeun-ko.github.io	

Education

2019.09. - 2021.08. M.S. UNIST

Electrical Engineering
Thesis: On the techniques for unsupervised person search
Advisor: Prof. Jae-Young Sim

2012.03. - 2019.02. B.S. Seoul National University of Science and Technology

Electrical and Information Engineering

2018.02. - 2018.07. Exchange Student at Czech Technical University in Prague

Electrical Engineering

Research Area

Image Processing and Computer Vision

Person search (Pedestrian detection, Person re-identification)
Object detection
Unsupervised learning

Employment History

2019.04. - 2019.08.

Research Internship in Visual Information Processing Lab., UNIST

- ✓ Object detection
- ✓ Generative models (VAE, GAN)

2017.06. - 2017.11.

Research Internship in Computer System Architecture Lab.,
Seoul National University of Science and Technology

- ✓ K-means clustering, PCA

International Conferences

(Under review) Context-Aware Unsupervised Clustering for Person Search.

Byeong-Ju Han*, **Ku-Hyeun Ko*** and Jae-Young Sim, in BMVC 2021.

* The two authors contributed equally to this work.

Trident Person Search Network End-to-End Trainable by Adaptive Gradient Propagation.

Byeong-Ju Han, **Ku-Hyeun Ko** and Jae-Young Sim, in Proc. IEEE ICCV, 2021.

Domestic Paper

물체 검출을 위한 색 변환을 이용한 데이터 증가

고규현, 심재영, 대한전자공학회 하계종합학술대회, 2020.

Domestic Patent

객체 검색 모델 및 그 학습 방법

심재영, **고규현**, 출원번호 10-2020-0166373, 2020.12.02.

Projects

Information-coordination Technique Enabling Augmented Reality with Mobile Objects

Institute for Information & Communications Technology Promotion (IITP)

2019.09.01. – 2021.08.31.

- ✓ Technical Lead
  - Unsupervised person search based on Pytorch
  - Object detection based on Pytorch
- ✓ Results
  - One submitted paper as co-first author at BMVC
  - One submitted paper as second author at IEEE/CVF ICCV
  - One published domestic paper as fist author at 대한전자공학회 하계종합학술대회
  - One applied domestic patent

Skills

Programming Languages & Frameworks

Python, Pytorch

Also basic ability with Matlab, Tensorflow

Tools & Environments

Docker, Git

Linux, Windows