## **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

Homepagehttps://Kuhyeun-Ko.github.ioGithubhttps://github.com/Kuhyeun-Ko

Education 2019.09. - 2021.08. M.S. UNIST

**Electrical Engineering** 

Thesis: Co-appearance Based Unsupervised Clustering for 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-ID)

Metric learning
Object detection
Unsupervised learning

**Employment History** 2019.04. - 2019.08.

Research Internship in Visual Information Processing Lab., UNIST

✓ Object detection2017.06. - 2017.11.

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

✓ K-means clustering, PCA

International Context-Aware Unsupervised Clustering for Person Search.

Conferences Byeong-Ju Han\*, Kuhyeun Ko\* and Jae-Young Sim, in BMVC, 2021.

\* Equal contribution

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

Byeong-Ju Han, Kuhyeun 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 published paper as co-first author at BMVC
  - One published 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