KU-HYEUN KO

Personal Data Researcher

Electrical and Computer Engineering (ECE) Research Institute Ulsan National Institute of Science and Technology (UNIST)

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Gender Male **Military Service** Conscripted Firefighters Agency

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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 detection

2017.06. - 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

End-to-End Trainable Trident Person Search Network Using 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