YOUNGMIN KIM

winston1214@naver.com 010-8445-4623

Education

Bachelor of Science degree expected in Computer Science and Engineering — Mar 2016 – Present
Incheon National University, Incheon

Bachelor of Arts degree expected in Economics — Mar 2016 – Present
Incheon National University, Incheon

Internships

Advanced Institute of Convergence Technology — Sep 2020 – Aug 2021
Computer Vision & AI Lab, Suwon

- Computer Vision Algorithm Development using Pytorch, YOLOv5 Algorithm Tuning
- Analysis of Sensor Data
- UI Development using PyQt5

RAISE (Real-time Artificial Intelligence Systems Engineering) Lab — Dec 2021 – Present
Computer Science in INU, Incheon

- Research of Real Time Object Detection & Multi Object Tracking

Extracurricular activities

BOAZ 16th member and operating group member — Jan 2021 – Jan 2022
Bigdata Alliance Club, Seoul

- Image Generation Paper Review& Application (GAN, CycleGAN)
- Practice Data Analysis with Kaggle Competition
- Project to translate and generate sign language videos.

Public Big-Data Youth Internship(2nd) — Jul 2020 – Sep 2020
NIA, Seoul

- Conducted project regarding Standard Analysis Model using python, QGIS, R
- Conducted project Selection the Optimum Location of Cheongju Roundabout in South Korea

Personal details

Name
YOUNGMIN KIM

Email address
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Phone number
010-8445-4623

Date of birth
December 14th, 1997

Github
github.com/winston1214

Tech Blog
bigdata-analyst.tistory.com

Skills

- Python
- Pytorch
- Ubuntu
- Git
- Nvidia mini PC

Certificates

ADsP

SQLD

Experience of Projects

Korean Sign-Language Translation — Aug 2021 - Jun 2022

BOAZ

- Proposed a Sign-Language Translation model using Key-point based Seq2Seq Model
- Proposed a video frame augmentation method to increase the performance of the Sign-Language Translation Model

Smart Eco Service - Object Counting — Mar 2021 - Jun 2022

Black Stone BelleForest

- Object Detection using YOLOv5 and Object Tracking using DeepSort and Centroid Tracking Algorithm
- Applied Algorithm on Jetson Nano and linked management server

AI learning data for search video of survivors using drones — Feb 2021 - Apr 2021

NIA

- Managing the building of survivor datasets Survivors Detection in 4K images using YOLOv5 Development of UI-Service

High-performance and high-durable tires for light rail and safety -enhancing health Developing monitoring technology — Nov 2020 - Dec 2021

KAIA

- Anomaly Detection & Impact Analysis in Tire Health Sensor Data

Integration of algorithms considering two-way driving of self-driving tram — Sep 2020 - Dec 2020

KRRI

- Development of Pedestrian Progress Direction Prediction and TTC prediction Algorithm using YOLOv5 and Optical Flow Inter -working with algorithms and ROS
- Development of GPS estimation technology for trams

Patents

- Apparatus and Method for Analyzing data, Apparatus, and Method for Predicting Abnormality, Computer program
- Electronic Apparatus and Method for Searching Distress, Unnamed Aerial Vehicle, Computer program
- Method and Apparatus for Avoiding Collision between Vehicle and Object, Computer Program

Paper

YOLOv5와 모션벡터를 활용한 트램-보행자 충돌 예측 방법연구 2021
KIPS, Published
- **김영민**, 안현욱, 전희균, 김진평, 안현욱,황현철

딥러닝과 Optical Flow를 활용한 보행자 사고 방지모델 2021
KCC2021-Best Paper, Published
- **김영민**, 장규진, 배현재, 김영남, 김진평

Optical Flow 추정 기술 및 최신 동향 2021
KIPS Special Edition
- **김영민**, 안현욱, 김진평

딥러닝 기반 교량 구조물 다중 손상유형 탐지시스템 2021
KCC2021, Published
- 김영남, 장규진, **김영민**, 배현재, 김진평

드론과 딥러닝을 활용한 조난자 탐지 모델 2021
KCC2021, Published
- 배현재, **김영민**, 김영남, 장규진, 김진평

사회적 거리 두기를 위한 스테레오 영상과 스켈레톤 정보기반 객체 간 거리 추정 방법 2021
KCC2021, Published
- 장규진, 배현재, **김영민**, 김영남, 김진평

Contest

AI HUB IDEA Challenge Competition Top Prize 2021

- A Smart ATM model that can prevent voice phishing face-to-face fraud damage in ATMs
- Object detection was performed using YOLO, and facial expression recognition was performed using Efficient-Net

KCC 2021 Undergraduate Paper Competition in Smart City Section Top Prize 2021

- Pedestrian Accident Prevention Model Using Deep Learning and Optical Flow (First Author)

KED 2021 Industrial Innovation Big Data Platform Competition Excellent Prize 2021

- Standard industry code classification (based BERT)