

# Youngmin Kim

✉ winston1214@naver.com | 🏠 <https://winston1214.github.io> | 📷 winston1214 | 📄 <https://bigdata-analyst.tistory.com>

## Research Interest

- Computer Vision, Story Visualization, Image Captioning, Text-to-Image Generation, Robust Detection

## Education

### Incheon National University

Incheon, Korea

#### BS UNDERGRADUATE DEGREE

2016.03 - 2023.02

- Major : Economics and Computer Science (Double Major)
- Magna Cum Laude (Top 5.9%)

## Publications

### INTERNATIONAL JOURNAL

Preprocessing for Keypoint based Sign Language Translation without Glosses  
**Youngmin Kim** and Hyeongboo Baek.

*Sensors 2023*

### INTERNATIONAL CONFERENCE

A 2-Stage Model for Vehicle Class and Orientation Detection with Photo-Realistic Image Generation  
**Youngmin Kim\***, Donghwa Kang\* and Hyeongboo Baek.

*IEEE BigData 2022*

### DOMESTIC JOURNAL

A Study of Tram-Pedestrian Collision Prediction Method Using YOLOv5 and Motion Vector  
**Youngmin Kim**, Hyeonuk Ahn, Heegyun Jeon, Jinpyung Kim, Gyujin Jang and Hyeonchyeol Hwang.

*KIPS 2021*

Optical Flow Estimation Techniques and Recent Research Trends Survey  
**Youngmin Kim**, Hyeonuk Ahn and Jinpyung Kim.

*KIPS Special Session*

### DOMESTIC CONFERENCE

Pedestrian Accident Prevention Model Using Deep Learning and Optical Flow  
**Youngmin Kim**, Gyujin Jang, Hyunjai Bae, YoungNam Kim and Jinpyung Kim.

*KCC 2021, Best paper*

Survivor Detection Model using Drones and Deep Learning  
Hyunjai Bae, Gyujin Jang, **Youngmin Kim**, YoungNam Kim and Jinpyung Kim.

*KCC 2021*

Deep Learning based Multiple Damage Type Detection System for Bridge Structures  
YoungNam Kim, Hyunjai Bae, **Youngmin Kim**, Gyujin Jang and Jinpyung Kim.

*KCC 2021*

Stereo Image and Skeleton Information based Inter-Distance Estimation for Social Distancing  
Gyujin Jang, Hyunjai Bae, **Youngmin Kim**, YoungNam Kim and Jinpyung Kim.

*KCC 2021*

### THESIS

A Study of Exchange Rate Behavior using Machine Learning  
**Youngmin Kim** and Sangyeon Hwang.

*B.S Thesis*

## Professional Experience

2023-  
Present **Undergraduate Research Assistant**, MIR Lab., Yonsei University

2021-2023 **Undergraduate Research Assistant**, RAISE Lab., Incheon National University

2020-2021 **Research Assistant**, CVAI Lab., AICT

## Awards, & Scholarship

---

2021	1st prize, AI-Hub Idea Challenge Competition	NIA
	1st prize, KCC 2021 Undergraduate Paper Competition	KIISE
	2nd prize, KED 2021 Industrial Innovation Big Data Platform Competition	KED
	Scholarship for Academic Excellence, 1st semester	INU
	Scholarship for Meritorious Service,	INU
2020	Scholarship for Academic Excellence, 1st semester	INU

## Projects

---

### NATIONAL OR ENTERPRISE

2021. **BlackStone Belle-Forest**, *Smart Eco Service - Object Counting*.
2021. **NIA**, *Building AI training data for search and rescue using drones*.
2020. **KAIA**, *Development of high-performance and highly durable tires for light rail systems and a safety-enhancing health monitoring system*.
2020. **KRRI**, *Integrating algorithms to enable self-driving trams to operate in bi-directions*.

### TOY-PROJECT

2021. **Incheon National University**, *Text-to-Image App Project (Artistic Sentence)*.  
Position : Leader
2021. **BOAZ**, *Korean Sign Language Translation*.  
Position : Leader

## Extracurricular Activities

---

2021-2022	BOAZ, 16th member of the Big Data Alliance Club, Big Data Analysis Part	Seoul
2020	Public Big Data Youth Internship, 2nd member, Government-funded program	Seoul

## Patents

---

### Apparatus and Method for Analyzing data, Apparatus, and Method for Predicting Abnormality, Computer Program

10-2020-0186453

### Electronic Apparatus and Method for Searching Distress, Unnamed Aerial Vehicle, Computer Science

10-2021-0089111

### Method and Apparatus for Avoiding Collision between Vehicle and Object, Computer Science

10-2020-0186453

## Military Service

---

### Korean Army, Ground Operations Command

2016.07 - 2019.03

ARMY SERGEANT, HONORABLE DISCHARGE