

## Interests

Deep Learning, Machine Learning, Model Compression  
Computer Vision, Robotics

## Languages

Korean -----Native  
English -----Intermediate

## Education

### Pusan National University

**Bachelor** 2014.03 ~ 2019.02

**Major:** Computer Science & Engineering

## Career

### Upstage

**Intern** 2021.08 ~ 2021.11

#### Model Compression

- +PyTorch to TensorRT conversion
- +Quantization

#### OCR Serializer Develop

### N Tech Service

**Intern** 2019.07 ~ 2019.08

#### Concert Booking Service

- +Back-end with JAVA Spring
- +Front-end with JS, HTML, CSS

## Education Clubs

### UnToc

*Project & Seminar Club  
for Computer Science & Engineering students  
2015.07 ~ 2016.09*

#### Develop Home Page

- +Front-end with zero-board
- +Back-end with PHP, MySQL

### Keeper

*Computer Security Club in Pusan National Univ  
2017.03 ~ 2019.02*

#### T.A

- +Reverse Engineering
- +Embedded System

## Scholar & Honors

<b>Scholarship</b>	2014, 2 <sup>nd</sup> semester 2016, 1 <sup>st</sup> semester
<b>LG Vulnerability Detection Certificate</b>	2016.12.12
<b>Special Prize in Codegate Hacking Video Competition</b>	2017.04.18
<b>Grand Prize in 2018 KISA Security hackathon</b>	2018.07.11
<b>2021 SOChallenge Track1. Small OBD 1<sup>st</sup> degree</b>	2021.12.10

## Skills

<b>Language</b>	Python, C++/C, JAVA
<b>Libraries/Platforms</b>	PyTorch, ROS, CUDA C/C++
<b>Develop Environment</b>	Linux, Windows, GIT

## Project & Study

### Neural Architecture Search

2021.05 ~ 2021.06

🔗 **NAS Project** [\[github URL\]](#) 🔗 **RPI Project with NAS Project** [\[github URL\]](#)

[\[Pytorch\]](#) [\[Optuna\]](#) [\[OpenCV\]](#) [\[tensorflow lite\]](#) [\[Raspberry PI\]](#) [\[Flask\]](#)

- + Develop model architecture search algorithms to get models more efficient
- + Develop converting modules Pytorch to TensorFlow Lite
- + Experiment on model pruning

### Recommendation System Study with kakao arena

2021.03 ~ 2021.04

🔗 **Recommendation System** [\[github URL\]](#)

[\[Pytorch\]](#) [\[Python\]](#) [\[pandas\]](#) [\[numpy\]](#)

- + Implement ConvMF (ref: ConvMF for Document Context-Aware Recommendation)
- + Implement Matrix Factorization

### Indoor Delivery Service with Robot

2018.04 ~ 2018.11

[\[Python\]](#) [\[ROS\]](#)

- + Implement SLAM algorithms with Lidar sensor
- + Develop control module for variable sensors (motor, Lidar etc)

### Object Detection & Semantic Segmentation

2021.04 ~ 2021.05

🔗 **Obd & Semantic Segmentation** [\[github URL\]](#)

[\[PyTorch\]](#) [\[OpenCV\]](#) [\[torchvision\]](#) [\[mmdet\]](#)

- + Develop augmentation module for image dataset increasement
- + Utilize Swin-Transformer & HRNet

### Smart Farm with Block-chain for Security

2018.05 ~ 2018.06

[\[PyTorch\]](#) [\[Ethereum\]](#) [\[Node JS\]](#) [\[Web3\]](#) [\[HTML\]](#) [\[CSS\]](#)

- + Develop Node JS server showing status of smart farm
- + Develop front-end page monitoring status of smart farm
- + **Won Grand Prize in 2018 KISA security hackathon**

## Experiments

### Boost Camp AI Tech 1<sup>st</sup>

2021.01 ~ 2021.06

**AI BoostCamp (Naver Connect)**

- + Learn Basic AI knowledge (mathematics, python programming, machine learning)
- + Enhance collaborative and communication skills with teammates
- + Learn ways to improve model performance through competitions

### Develop with Google 2<sup>nd</sup>

2018.01 ~ 2018.02

**Google Korea**

- + Study various areas about computer science & engineer (web, IoT, android etc)
- + Learn coworking skills with github

### Best of the Best Vulnerability Analysis Track 5<sup>th</sup>

2016.07 ~ 2017.03

**KITRIE**

- + Learn vulnerabilities analysis
- + **Project: Vulnerability Attack to Forensic Analysis**
  - + Analyze network vulnerabilities
  - + Analyze hardware system vulnerabilities
  - + Obtain LG vulnerability detection certification
  - + **Present at TROOPERS 2017, HITCON 2018(presenter: JoMinJung) etc**