

### Al Researcher, Data Scientist

(+82) 10-7922-9738 | xoal9797@gmail.com

### Education

#### KAIST(Korea Advanced Institute of Science and Technology)

M.S. in INDUSTRIAL AND SYSTEMS ENGINEERING

Total GPA of 3.71 / 4.3

**Ewha Womans University** 

**B.S. in STATISTICS** 

Total GPA of 3.99 / 4.3 (4.24 / 4.5)

Daejeon, S.Korea

Mar. 2021 - Feb. 2023

Seoul, S.Korea

Mar. 2016 - Feb. 2021

## Experience \_\_\_\_\_

#### SAMSUNG Electronics, Innovation Center

RESEARCHER

Facility process intelligence Develop automatic abnormality detection system Hwaseong, S.Korea

# Project\_

#### Seegene Medical Diagnosis System Based on Al

KAIST, Daejeon Mar. 2021 - Feb. 2023

RESEARCHER

- · Research project with Seegene
- Weakly supervised learning for microscope histopathology segmentation
- Applying camouflaged object detection based modules to fully convolutional network
- Design of an deep Learning based architecture and pipelines for malignant tumor segmentation using colon pathology dataset.

#### ETRI Human Understanding Artificial Intelligence Paper Competition

KAIST, Daejeon April. 2022 - June. 2022

**CONTRIBUTOR** 

Emotion recognition task using multimodal dataset (text & audio of dialogue)

- Development of LSTM/Transformer based model
- Design of a loss for resolving class imbalance problem

#### Self-supervised Learning for Music Genre Classification

KAIST, Daejeon

Mar. 2022 - June 2022

Mar. 2021 - June. 2021

**CONTRIBUTOR** 

- Audio genre classification task
- Implementation of self supervised learning using SimSiam based model
- Applying audio augmentation methods

#### Stackoverflow Tag Prediction

KAIST, Daejeon

#### **CONTRIBUTOR**

- Tag prediction task using graph data
- Implementation of GNN based model

## **Publications**

#### Weakly Supervised Semantic Segmentation of Histopathology Image

Taemi Kim, Sungrae Hong, Youngsin Go, Yumi Choi, Mun Yi, KIIE, 2022.

#### A Simple Cut Augmentation for Medical Pathology Image

Sungrae Hong, Taemi Kim, Youngsin Go, Yumi Choi, Mun Yi, KIIE, 2022.

#### MATE: the Multimodal model using Audio and Text for Emotion recognition

Sungrae Hong, Taemi Kim, Sol Lee, Jongwoo Kim, Mun Yi, KIISE, 2022.

## Thesis

MASTER'S THESIS KAIST, Daejeon

Applying Camouflaged Object Detection Modules to Microscopic Histopathology Images for Weakly Supervised Semantic Segmentation

## Awards & Honors ——

#### **AWARDS**

2022 MSIT Minister's Award, ETRI Human Understanding Artificial Intelligence Paper Competition

#### **HONORS**

- 2020 Academic Excellence Honors, awarded to students with high grade throughout the semester
- 2018 Academic Excellence Scholarship, awarded to students with the highest grade in the college throughout the year
- 2018 Academic Excellence Honors, awarded to students with high grade throughout the semester
- 2016 Academic Excellence Honors, awarded to students with high grade throughout the semester

# Extracurricular Activity \_\_\_\_\_

#### BITAmin (Machine Learning Club in Seoul)

#### **MEMBER**

- ML / DL study seminar
- · Hosting a DL conference with mini projects

## Skills \_\_\_\_

Programming Python, C++

Deep Learning Pytorch

## Language Skills

#### **ENGLISH**

TOEIC 985 (Aug. 2022 -)