# Seongho Yoon

Integrated M.S / Ph.D student

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https://github.com/YoongSeongHong

## **EDUCATION**

Mar. 2025 ~ Present	Korea University School of Industrial Management Engineering	Seoul, Korea
	Master Student	
Mar. 2019 ~	Kwangwoon University	Seoul,
Feb. 2025	Department of Information Convergence	Korea
	Advisor: Sangmin Lee	
	B.S. in Information Convergence	
	GPA: 4.21 / 4.5	

#### **RESEARCH INTERESTS**

- Computer vision
- Anomaly detection

#### **PAPERS**

- Joonhyeon Song, Seohwan Yun, Seongho Yoon, Joohyeok Kim, Sangmin Lee EP-SAM: Weakly Supervised Histopathology Segmentation via Enhanced Prompt with Segment Anything https://arxiv.org/abs/2410.13621
- Joohyeok Kim, Joonhyeon Song, Seohwan Yun, Seongho Yoon, Sangmin Lee, CAD: Memory Efficient Convolutional Adapter for Segment Anything https://arxiv.org/abs/2409.15889

## **INTERNSHIPS**

## **Research Participant**

- AI as a Service Laboratory, Kwangwoon University, Korea (Jun. 2023 ~ Present)
- Participated in research paper seminar
- Research on Weakly Supervised Semantic Segmentation in Digital Pathology

#### **PATENTS**

1. Joonhyeon Song, Seohwan Yoon, Seongho Yoon, Joohyeok Kim, Yunhyeok Do, "APPARATUS AND

METHOD FOR WEAKLY SUPERVISED SEMANTIC SEGMENTATION FRAMEWORK OF IMAGE AND COMPUTER-READABLE RECORDING MEDIUM INCLUDING THE SAME", KR-Application No. 10-2024-0117533

# **PROJECTS**

### A web application for trend analysis and image retrieval for users in the fashion industry

- Industry-Academia collaboration capstone design project (Apr. 2024 ~ Oct. 2024)
- Data collection automation using the Apache Airflow framework
- · Development of an image retrieval system using the Grounded-SAM model on collected data

# Mortality risk analysis using patient information

- Team project for course Data Analysis of 2023 Fall semester (Oct. 2023 ~ Nov. 2023)
- · Using various types of machine learning and deep learning models for predicting mortality
- Rule extraction for patient mortality using a decision tree model
- Analysis of mortality scenarios for specific patients

### Prediction of thyroid disease classification

- Team project for course Data Mining of 2023 Fall semester (Oct. 2023 ~ Nov. 2023)
- Training a predictive model to classify thyroid disease based on patient information
- Conducting feature engineering using various methods of feature selection and extraction

#### Generating questions based on summaries of international news articles

- Team project for course Text Mining of 2023 Spring semester (Apr. 2023 ~ Jun. 2023)
- Collecting international news article data through web crawling
- · Extractive summarization techniques were utilized to convert the collected data into questions

### Analysis of factors influencing specific types of traffic accidents

- Team project for course Big Data Language of 2022 Spring semester (Apr. 2022 ~ May. 2022)
- Collecting TMACS traffic accident data through web crawling
- Performing correlation analysis after merging various road information datasets

# **AWARDS AND HONORS**

- Encouragement Award in the Industry-Academia Collaboration Software Project Exhibition, Kwangwoon University, Korea (Nov. 2024)
- Encouragement Award in the Capstone Design Exhibition of the School of Information Convergence, Kwangwoon University, Korea (Nov. 2024)
- National Science & Technology Scholarship, KOSAF, Korea (Mar. 2023 ~ Dec. 2024)
- Academic Excellence Scholarship, Kwangwoon University, Korea (Dec. 2022)
- Academic Excellence Scholarship, Kwangwoon University, Korea (Aug. 2022)
- Dean's List (Academic Excellence Award), Kwangwoon University, Korea (May. 2020)
- Academic Excellence Scholarship, Kwangwoon University, Korea (Dec. 2019)
- Academic Excellence Scholarship, Kwangwoon University, Korea (Aug. 2019)

# **SKILLS AND TECHNIQUES**

· Python, Java

- Scikit-learn, PyTorch, Tensorflow
- Numpy, Pandas
- Airflow

# **CERTIFICATION**

- SQLD (Sep. 2022)
- ADsP (Sep. 2022)
- Korean History Proeficiency Test level 1 (Sep. 2021)

# **ENGLISH PROFICIENCY**

• TOEIC 825 (Feb. 2024)

# **WORK EXPERIENCE**

• Working as a tutor at D.LAB Coding Academy Jeongja Branch(Mar. 2023 ~ Nov. 2024)