

# YE JIN JEON

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## EDUCATION

### University of California, San Diego

Master Student

- Master of Science in Computer Science and Engineering

Sep 2022 – Present

San Diego, USA

### Ewha Womans University

Undergraduate Student – Double Major

- Bachelor of Science in Mechanical and Biomedical Engineering
- Bachelor of Science in Computer Science and Engineering
- Total GPA of 3.71/ 4.0

Mar 2017 – Feb 2022

Seoul, Korea

## RESEARCH EXPERIENCES

### Quantitative Imaging & Informatics Lab in Korea Univ.

Research Intern (Adviser: Professor Jin Tae Kwak)

- Conducted research on developing 3-D multitask deep neural networks for generating collateral imaging from brain MRI, and presented at SPIE Medical Imaging 2021
- Preprocessed brain MRI and enhanced performance of the model employing multi-task learning

May 2020 – Sep 2020

Seoul, Korea

### Artificial Intelligence-driven Biomedical Imaging Lab in Ewha Univ.

Research Intern (Adviser: Professor Jang-Hwan Choi)

- Led project on automated lesion detection in wireless capsule endoscopy, and gave oral presentation at IWAIT-IFMIA 2019
- Trained and tested deep learning algorithms for classification and object detection

Mar 2018 – July 2019

Seoul, Korea

## INTERNSHIPS

### Tanker Fund Inc.

Software Engineer Intern

- Worked to recognize texts sequentially in real-estate related documents using image processing and parsing
- Improved the performance of machine learning algorithm for real estate price prediction by analyzing data
- Proposed a business of human resource assignment system using reinforcement learning to IBK (Industrial Bank of Korea)

Mar 2021 – June 2021

Seoul, Korea

### Electronics and Telecommunications Research Institute (ETRI)

Research Intern

- Participated in AI system research that detects smuggling and dangerous goods in X-ray scanner images
- Developed masking algorithm to segment composite swords in X-ray container images using ImageJ

July 2019 – Aug 2019

Daejeon, Korea

## PROJECTS

### AI Stroke Rehabilitation Exercise Assistant Smart-Mirror

- Implemented the pose estimation model to be executed on the Raspberry pi and Intel neural stick
- Created a web interface that allows users to pick and watch exercise videos and visualizes analysis of exercise

Sep 2020 – Dec 2020

### Pill Recognition and Information Provision Android App.

- Developed deep learning algorithm which detects pills on images, and detects & recognizes texts on pills
- Implemented deep learning (LSTM) to correct spelling mistakes of pill identification

Mar 2020 – Dec 2020

## CONFERENCE PAPERS

- H.L. Le, **Y. Jeon**, H.G. Roh, H.J. Kim, and J.T. Kwak. "3-D multitask deep neural networks for collateral imaging from dynamic susceptibility contrast-enhanced magnetic resonance perfusion." SPIE Medical Imaging 2021: Computer-Aided Diagnosis (SPIE), 2021.[[paper](#)]
- S.H. Son, **Y. Jeon**, S.H. Bae, and S.J. Hwang. "A pill recognition and information provision system using a identification mark recognition model of pill image taken with a smartphone." Korea Software Congress 2020 of Korean Institute of Information Scientists and Engineers (KIISE), 2020.
- **Y. Jeon**, E. Cho, S. Moon, S.H. Chae, and J.H. Choi. "Deep convolutional neural network-based automated lesion detection in wireless capsule endoscopy." Joint International Workshop on Advanced Image Technology (IWAIT) and International Forum on Medical Imaging in Asia (IFMIA), 2019.[[paper](#)]

## TECHNICAL SKILLS

- **Programming Languages:** Python, C, Java, HTML, CSS, JavaScript
- **Others:** Django, Tensorflow, Pytorch, Git & Github, Docker, Linux