

Yehyun Suh

+1-(770)-298-7887 • Nashville, TN

yehyun.suh@vanderbilt.edu • [linkedin.com/in/yehyun-suh/](https://www.linkedin.com/in/yehyun-suh/) • yehyunsuh.github.io/

EDUCATION

Vanderbilt University Ph.D. in Computer Science	Aug 2023 – Present Nashville, TN
Vanderbilt University Master of Science in Computer Science	Aug 2022 – July 2023 Nashville, TN
Dongguk University Bachelor of Science in Information & Communication Engineering	Mar 2016 – Feb 2022 Seoul, South Korea

RESEARCH EXPERIENCE

Vanderbilt Information Engineering (VINE) Laboratory , Vanderbilt University <i>Graduate Student Researcher</i> (Advisor: Professor Daniel Moyer)	Sep 2022 – Present Nashville, TN
innovative Radiology AI Laboratory (iRAIL) , Seoul National University Hospital <i>Research Intern</i> (Principal Investigator: Jisun Hwang M.D.)	May 2022 – Aug 2022 Seoul, South Korea
Intelligent Software Architecture (ISA) Laboratory , Dongguk University <i>Undergraduate Student Researcher</i> (Advisor: Professor Woongsup Kim)	Mar 2020 – Feb 2022 Seoul, South Korea

PUBLICATIONS

[1] **Yehyun Suh**, Aleksander Mika, J. Ryan Martin and Daniel Moyer, *Dilation-Erosion Methods for Radiograph Annotation in Total Knee Replacement*, Medical Imaging with Deep Learning (MIDL), short paper track, 2023

TEACHING EXPERIENCE

Programming and Problem Solving , Vanderbilt University <i>Graduate Teaching Assistant</i>	Jan 2023- Apr 2023 Nashville, TN
Artificial Intelligence in the Future Society , Dongguk University <i>Undergraduate Teaching Assistant</i>	Aug 2021- Dec 2021 Seoul, South Korea
Computational Thinking , Dongguk University <i>Undergraduate Teaching Assistant</i>	Mar 2021 – June 2021 Seoul, South Korea

WORKING EXPERIENCE

Subdream Studios <i>Software Developer and Game Analyzing Intern</i>	June 2021 – Aug 2021 Remote
College of Engineering Office <i>Working Scholar</i>	Mar 2020 – Jan 2021 Seoul, South Korea

PROJECTS

- Deep learning-based determination of Risser stage trend using abdominal radiographs in Korean children**, Seoul National University Hospital May 2022 – Aug 2022
- Developed an image classification model that can predict Risser stage from the patient's iliac crest radiographs
 - Implemented semantic segmentation to segment pelvic bone from iliac crest radiographs
 - On external validation set, the model achieved top1 and top2 ACC of 70.2% [CI: 63.9-76.4] and 93.8% [CI: 90.4-96.6], AUROC of 0.937 [CI: 0.900-0.966] and MAE of 0.341 [CI: 0.269-0.423]

- Discovered a problem that people who were excluded from medical benefits did not receive an appropriate prescription in time
- Developed a model that can search the most similar pill from the pill image given from the user by extracting features such as shape, type, and color of pills through image classification
- Final performance of the model - top1 accuracy: 43% , top5 accuracy: 80%
(<https://github.com/boostcampaitech3/final-project-level3-cv-16>)

HONORS AND AWARDS

- **Dean's List**, Dongguk University, 2016 Spring/2016 Fall/2020 Spring/2020 Fall/2021 Spring
- Software Academic Excellence Scholarship, Dongguk University, 2020 Fall/2021 Spring
- Academic Excellence Scholarship, Dongguk University, 2016 Spring/2016 Fall/2021 Spring
- **3rd Place in XR Challenge Competition**, Ministry of Science and ICT, Korea, 2021
- 3rd Place in Summer Dongguk Capstone Value Up Program, Dongguk University, 2021
- **2nd Place in Graduation Project Competition**, Dongguk University, 2021
- 4th Place in Winter Dongguk Capstone Value Up Program, Dongguk University, 2021
- Course Excellence Scholarship, Enterprise & Society Tailored Capstone Design, Dongguk University, 2021
- Course Excellence Scholarship, Operating System, Dongguk University, 2020
- **Oversea Academic Tour Scholarship**, Dongguk University, 2017

EXTRACURRICULAR ACTIVITIES

Korean Graduate Students and Scholars Association , Vanderbilt University <i>Secretary</i>	Aug 2022 – Present Nashville, TN
Boostcamp AI Tech , Naver Connect Foundation <i>Computer Vision Track</i>	Jan 2022 – June 2022 Seoul, South Korea
Innovation Center for Engineering Education , Dongguk University <i>President of the Student Committee 'DAVINCI'</i>	Jan 2021 – Dec 2021 Seoul, South Korea
Information & Communication Engineering , Dongguk University <i>Vice President of the Student Committee</i>	Jan 2020 – Dec 2020 Seoul, South Korea
Dongguk University Tennis Club <i>Regular Member</i>	Sep 2016 – Feb 2022 Seoul, South Korea

REFERENCES

Daniel Moyer, Assistant Professor
Department of Computer Science
School of Engineering
Vanderbilt University
daniel.moyer@vanderbilt.edu

Jisun Hwang, Clinical Assistant Professor
Department of Radiology
Dongtan Sacred Heart Hospital
Hallym University Medical Center
biydjs@hallym.or.kr

Woongsup Kim, Professor
Department of Information & Communication Engineering
College of Engineering
Dongguk University
woongsup@dongguk.edu

Sungyoun Choi, Research Professor
Innovation Center for Engineering Education
College of Engineering
Dongguk University
choisung@dongguk.edu