Younga Shin

Master student Yonsei University 50, Yonsei-ro, Seodaemun-gu, Seoul, Republic of Korea younga.shin@yonsei.ac.kr & shinyounga00@gmail.com https://shinyounga.github.io/

EDUCATION

Sep. 2024 ~ Yonsei University Seoul,
Present School of Civil and Environmental Engineering Korea

Advisor: Hongjo Kim

Master Student GPA: 4.22 / 4.3

Mar. 2019 ~ **Dongguk University** Seoul, Aug. 2024 Department of Film Production Korea

Advisor: Jongho Park

B.A. in Film and Digital Media

GPA: 4.22 / 4.5 Summa Cum Laude

RESEARCH INTERESTS

- Levee Failure
- Water level fluctuation
- Retrieval Augmented Generation
- Object detection image segmentation

CONFERENCES

- 1. Younga Shin, Hongjo Kim, "2024 KICEM Annual Conference", Korea Institute of Construction Engineering and Management, Jeju, Korea (Nov. 2024) Poster
- 2. Younga Shin, Kichang Choi, Yeonjoo Kim, Hongjo Kim, "Creative Construction Conference (2025)", Creative Construction Conference (CCC), Zadar, Croatia (Jun. 2025) Oral

PROJECTS

- Autonomous Evolutionary AI-Based Smart Sensing Platform for Early Detection and Proactive Response to Levee Failures, National Research Foundation of Korea, Korea / Project Manager (Aug. 2024 ~ Present)
- Vision-Based Safety Securing Technology for Temporary Structure Installation and

Dismantlement, The Korea Agency for Infrastructure Technology and Advancement, Korea / Development a dataset for object detection for PPE (Personal Protective Equipment) (May. 2024 ~ Present)

 Development of Intelligent CCTV-AI-Based Construction Site Video Analysis Technology, Kumho Engineering & Construction, Korea / Video Editor & Content Creator (May. 2024 ~ Present)

CERTIFICATIONS

- Engineer Information Processing (2024.06.18)
- Engineer Surveying Geo-Spatial Information (2022.12.30)
- Engineer Cadastral Surveying (2023.09.01)
- Computer Specialist in Spreadsheet & Database Level-1 (2022.03.11)
- Driver's License (1st Class Ordinary) (2021.02.09)
- Korean History Proficiency Test Level 1 (2024.06.05)

LANGUAGE

- English: TOEIC 925, TOEIC Speaking: Advanced Low
- French: Basic conversational proficiency

SKILLS AND TECHNIQUES

- Deep Learning and AI Applications
 - Developed deep learning models for water level prediction in ungauged river basins
 - Applied computer vision models for object detection and segmentation of construction workers and PPE (Personal Protective Equipment) to support on-site safety monitoring
- Media Production & Visual Communication
 - Videographing PD, SBS NEWS SUBUSU NEWS (1.23M subscribers), Korea (Jul. 2021 Feb. 2024)
 Planned and executed visual sequences for news features, managing camera, lighting, and sound in collaboration with editorial teams.
 - Filmed and edited 40+ short films as assistant director, cinematographer, and post-production editor
 - Taught youth how to produce barrier-free films through a 2-year volunteer media education program
 - Skilled in visual storytelling, branding, and multicultural communication
- Software and Tools
 - BIM software (e.g., Revit) for parametric modeling and automation of levee cross-sections using Dynamo, including geotechnical attributes
 - Docker for deployment of machine learning models
 - Deep learning framework (PyTorch, TensorFlow, Keras)
 - Video editing (Final Cut Pro, Adobe Premiere Pro)
 - Graphic design (Adobe Photoshop, Illustrator)

AWARDS AND HONORS

- Academic Excellence Scholarship, Dongguk University, Korea (Mar. 2020)
- Academic Excellence Scholarship (top academic achievement in class; aesthetics of film),
 Dongguk University, Korea (Mar. 2020)
- 2020 Cultural Heritage Channel Video Contest Idea Bank Award Winner, Cultural Heritage Administration, Korea (Nov. 2020)
- Work scholarship (student council), Dongguk University, Korea (Sep. 2020)
- Academic Excellence Scholarship, Dongguk University, Korea (Mar. 2021)
- Academic Excellence Scholarship, Dongguk University, Korea (Mar. 2023)
- Academic Excellence Scholarship, Dongguk University, Korea (Sep. 2023)
- Jongno-gu Scholarship Foundation Scholarship, Jongno-gu Scholarship Foundation, Korea (Feb. 2025)