

Heechan Yang

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KAIST, 291 Daehak-ro, Yuseong-gu, Daejeon

EDUCATION

M.S in School of Computing

Aug 2023 – Feb 2026

Korea Advanced Institute of Science and Technology (KAIST), South Korea

- Advisor: Prof. Moonzoo Kim (Ph.D in Computer Science at University of Pennsylvania)

B.S in Computer Science and Engineering

Mar 2018 – Aug 2023

Handong Global University (HGU), South Korea

- Advisor: Prof. Shin Hong (Ph.D in Computer Science at KAIST)

RESEARCH EXPERIENCE

Software Testing & Verification Group (SWTV Group)

Apr 2026 – Present

Research Associate

- Automate Software Testing
- Automated Software Debugging

Software Testing & Verification Group (SWTV Group)

Aug 2023 – Feb 2026

Master's Degree

- Research with LIGNex1: Deep Learning Based Fault Localization Technique
- Skills: C/C++, Python, Pytorch, PostGreSQL

Advancing Reliability, Safety & Security in Software Engineering (ARISE Lab)

Dec 2022 – Aug 2023

Undergraduate Research Assistant

- Research with SureSoft: Source Code Embedding using CodeBERT

Advancing Reliability, Safety & Security in Software Engineering (ARISE Lab)

Dec 2021 – Dec 2022

Capstone Design

- Developed Neural Language Model-based Code Mutation Generating Tool for C/C++ Program Testing
- Developed Neural Language Model-based Text Editing Tool for OCR Result of Unstructured Children Education Materials
- Skills: Pytorch, ReactJS (Web Service)

WORK EXPERIENCE

Office of the United Nations High Commissioner Human Rights

Sep 2022 – Dec 2022

Internship: Program Support and Management Services

- Developed a software to increase mobility of working places around staff members of the United Nations

PUBLICATIONS

International conference paper

- **H. Yang**, A. Lee, K. Cho, Y. Kim, Industrial Application of Deep Learning based Fault Localization with Mutation Features, IEEE International Conference on Software Testing, Verification and Validation (ICST), May 18-22, 2026

Domestic conference paper

- **H. Yang**, A. Lee, I. Lee, K. Cho, M. Kim, Systematic Study of Mutation-Based Dataset Construction for Deep Learning-Based Fault Localization on Military Defense SW, Korea Conference on Software Engineering (KCSE), Feb 2026
- **H. Yang**, A. Lee, I. Lee, H. Nam, N. Jung, K. Cho, M. Kim, How to Create Dataset to Train a ML Model for Fault Localization: A Case Study on JsonCpp, Korean Computer Congress (KCC), June 2024
- E. Ahn, **H. Yang**, E. Jee, S. Hong, A Neural Language Model-based Text Editing Tool for OCR Result of Unstructured Childhood Education Materials, Korean Software Conference (KSC), Dec 2022 (**Undergraduate student research competition award**)

TEACHING ASSISTANT

Dynamic Analysis of Software Source Code <ul style="list-style-type: none">• Assist Professor with examining student assignments & exams	Mar 2025 – June 2025
Object-Oriented Design Pattern (OODP) <ul style="list-style-type: none">• Assist Professor with examining student assignments & exams	Mar 2021 – June 2021
Introduction to Software <ul style="list-style-type: none">• Assist Professor with examining student assignments & exams	Jan 2021 – Feb 2021

LEADERSHIP EXPERIENCE

Vice-president of School of Computing (Graduate) School of Computing, KAIST <ul style="list-style-type: none">• Manage student council	Sep 2023 – Present
President of CSEE Department (Undergraduate) School of Computer Science and Electrical Engineering, HGU <ul style="list-style-type: none">• Manage student council, events, and financials	Jan 2022 – June 2022
Vice-president of School Department Organization Student Council of Presidents and Vice-president from each School Departments, HGU <ul style="list-style-type: none">• Manage student council, events, and financials	Jan 2022 – June 2022
Vice-president of CSEE Department (Undergraduate) School of Computer Science and Electrical Engineering, HGU <ul style="list-style-type: none">• Manage student council, events, and financials	July 2021 – Dec 2022

AWARDS & SCHOLARSHIPS

Handong Global University, CSEE

Academic excellence scholarship (upper 15%).

Jan 2023

Korean Software Congress (KSC), KIISE

Undergraduate Student Research Competition, Bronze Award

Feb 2023

ON-CAMPUS ACTIVITIES

Software Education

Sept 2022 – Dec 2022

Social Service

- Conducted Arduino with Smart-Farm project for high school students

Impromptu 2AM (Jazz Band)

March 2018 – June 2018

School Circle

- Performed concerts (bass guitar)

SKILLS & TECHNIQUES

English Score: OPIc – IH (March 2025), TOEIC – 935 (Jan 2022)

Last updated: March 19, 2026