
EDUCATION

University of Michigan <i>Ph.D. in Computer Science and Engineering (Advisor: Lu Wang)</i>	Aug 2024 - Present
Seoul National University <i>B.S. in Computer Science and Engineering</i> <i>GPA: 4.18/4.3 (cumulative), 4.17/4.3 (major)</i> <i>Summa cum laude, rank: 1st in the department</i>	Mar 2020 - Feb 2024
Seoul Science High School <i>The school for gifted students in mathematics and science, teaching college-level math and science</i> <i>GPA: 4.18/4.3</i>	Mar 2017 - Feb 2020

WORK EXPERIENCE

NAVER Cloud HealthCare AI <i>Research Intern</i>	Mar 2024 - Jun 2024 <i>Seongnam, South Korea</i>
• Contributed to the curation of an EMR note retrieval dataset using entity linking algorithms	
Language and Data Intelligence Lab <i>Undergraduate Research Intern (Advisor: Prof. Seung-won Hwang)</i>	Mar 2023 - Feb 2024 <i>Seoul, South Korea</i>
• Participated in improving language-based image editing interface using cycle consistency	
• Published in the IJCNLP-AACL workshop as a co-first author	
DeepMetrics <i>Machine Learning Engineering Intern (Advisor: Prof. Hyun Oh Song)</i>	Jun 2022 - Jan 2023 <i>Seoul, South Korea</i>
• Participated in medical data preprocessing & developed algorithms for autonomous ventilator manipulation	
Samsung Device Solutions Memory <i>Software Intern</i>	Jul 2021 - Aug 2021 <i>Hwaseong, South Korea</i>
• Participated in semiconductor wafer anomaly detection using machine learning algorithms	

HONORS AND AWARDS

Best Presentation Award, NLP @ Michigan Day	Mar 2025
Kwanjeong Educational Foundation Scholarship	Aug 2024 - Present
Outstanding Student Commendation from the Alumni Association	Feb 2024
Excellent Bachelor's Thesis Presentation Award	Feb 2024
SNU Tomorrow's Engineers Membership <i>Honor Society of Seoul National University College of Engineering</i>	Mar 2022 - Aug 2022
Outstanding Tutor Award <i>Award bestowed upon tutors demonstrating outstanding achievements and exemplary dedication in the peer tutoring program</i>	Aug 2021

Presidential Science Scholarship	Mar 2020 - Feb 2024
<i>Full tuition plus living expenses support for undergraduate students majoring in science and technology</i>	
Volunteer Service Silver Certificate	Dec 2019
<i>Certificate awarded for over 500 hours of volunteer service</i>	
Winter School of the Korean Physics Olympiad	Jan 2018 - Jan 2018
<i>Program for International Physics Olympiad (IPhO) candidates sponsored by the Korean Physical Society</i>	

PROJECTS

WaffleStudio Toy Project	Dec 2022 - Feb 2023
<i>Web & App Development Project hosted by Seoul National University</i>	
<ul style="list-style-type: none"> Developed a sharable calendar web service using Next.js and Django Secured the third position among all the competing participants frontend, backend 	
K-Startup Maker Project	Jul 2020 - Dec 2020
<i>Maker Project hosted by the Korean Government</i>	
<ul style="list-style-type: none"> Awarded 5,000\$ in funding Developed a software for "Sensorless Robot Navigation via External Camera Monitoring" as vision team leader Used U-Net for driving area detection and DOPE (Deep Object Pose Estimation) for robot position detection code 	
International Student Car Competition 2020	Apr 2020 - Aug 2020
<i>Electric Car Competition for Students at an International Level, Autonomous Car Category</i>	
<ul style="list-style-type: none"> Developed a comprehensive autonomous driving structure Implemented real-time parking lot detection by modifying YOLOv3's structure and loss function and accurate lane detection using LaneNet code 	

PUBLICATIONS

Enhancing Multilingual Reasoning in Language Models	
<ul style="list-style-type: none"> - Exploring different rollout methods and loss functions in RL to improve multilingual reasoning. - Generating synthetic training datasets to improve multilingual reasoning. 	
<i>Ongoing Project</i>	
LiveOIBench: Can Large Language Models Outperform Human Contestants in Informatics Olympiads?	
<ul style="list-style-type: none"> - Implemented self-debugging baselines. 	
<i>Kaijian Zou, Aaron Xiong, Yunxiang Zhang, Xinliang Frederick Zhang, Yueqi Ren, Jirong Yang, Ayoung Lee, Shitanshu Bhushan, Lu Wang</i>	
<i>Submitted to ICLR 2026</i>	
Logit Arithmetic Elicits Long Reasoning Capabilities Without Training	
<ul style="list-style-type: none"> - Ran supervised fine-tuning experiments, with and without LoRA, for distillation baselines. 	
<i>Yunxiang Zhang, Muhammad Khalifa, Lechen Zhang, Xin Liu, Ayoung Lee, Xinliang Frederick Zhang, Farima Fatahi Bayat, Lu Wang</i>	
<i>COLM 2025, The 1st Workshop on Test-time Scaling and Reasoning Models, Submitted to ARR 2025 Oct [paper]</i>	
CLASH: Evaluating Language Models on Judging High-Stakes Dilemmas from Multiple Perspectives	
<i>Ayoung Lee, Ryan Sungmo Kwon, Peter Railton, Lu Wang</i>	
<i>Preprint, Submitted to ICLR 2026 [paper]</i>	

On Consistency Training for Language-Based Image Editing Interface

Youngwon Lee*, Ayoung Lee*, Yeonjoon Jung, Seung-won Hwang (* denotes equal contribution)

IJCNLP-AACL 2023, Second Workshop on Natural Language Interfaces (Oral) [\[paper\]](#) [\[code\]](#)

TALKS

Injecting Math Reasoning Abilities in Language Models

Jun 2024

@ Deepest, Seoul National University

Study Abroad Presentation for Students

May 2024

@ Seoul Science High School

TEACHING

(M1522.000700) Logic Design, Seoul National University

Sep 2021 - Dec 2021

Seoul, South Korea

Teaching Assistant (Instructor: Jihong Kim)

(034.005) Foundation of Physics 1, Seoul National University

Mar 2021 - Aug 2021

Seoul, South Korea

Peer Tutor

(M1522.000700) Logic Design, Seoul National University

Mar 2021 - Aug 2021

Seoul, South Korea

Tutor

SKILLS

Programming

Python, Java (proficient), C, C++, TypeScript (intermediate),
PyTorch (proficient), React, Next.js, Django, Tensorflow (intermediate),
Git (proficient)

Communication

Korean (native), English (fluent, TOEFL 115/120 with R 29 L 30 W 27 S 29)