Jincheol Jung

https://bik1111.github.io Google Scholar

Cloud/Edge Computing, Intelligent Systems, Federated Learning Interests

EDUCATION Kyung Hee University Undergraduate Student

Mar 2022 - Feb 2025

Seoul, Korea

• Bachelor of Software Convergence

• Total GPA of 3.05 / 4.3 (87.8 / 100)

National Institute for Lifelong Education (NILE) Oct 2020 – Feb 2022

Credit Bank System

Myongji College

Seoul, Korea

• Bachelor of Business Administration

• Total GPA of 2.97 / 4.5 (81.89 / 100)

Associate's Degree (Withdrawal)

Mar 2015 - Jun 2015

Seoul, Korea

• Department of Theater and Visual Arts

• Completed one semester

• GPA: 2.97/4.5

Publications

ACCEPTED

Jincheol Jung, Hongju Jeong, and Euinam Huh. "Federated Learning and RAG Integration:

A Scalable Approach for Medical Large Language Models". In IEEE international conference on artificial intelligence in information and communication (ICAIIC), 2025, To Appear [pdf]

PUBLISHED

Jincheol Jung. "Performance Analysis of Metric-Based Scaling in Kubernetes Environments: A Comparative Study of CPU Utilization and Custom Metric Approaches". In Annual Conference of the Korean Information Processing Society (ACK), 2024

Jincheol Jung, Sungwon Lee. "Performance Comparison Analysis of gRPC and ZeroMQ for Efficient Library Selection in Chat Service Development". In KIISE(Korean Institute of Information Scientists and Engineers) Korea Computer Congress (KCC), 2024 [pdf]

Honors and AWARDS

University Innovation Scholarship, Kyung Hee University, 2022

Awarded for contributions as undergraduate research assistant

SW Ownership, Kyung Hee University, 2023

Recognized for excellence in extracurricular software activities

Google Hardware Hackathon, Google Korea, 2024

1st Place among 8 teams

Excellent Award in Artistic Software Competition, Kyung Hee University, 2023

Collaborated with College of Art and Design students; 3rd Place among 20 teams

Special Award in SW-centered University Hackathon, National Center of Excellence in Software, 2023

7th Place among 46 teams from 51 universities; received a special award

Excellent Award in University Student IT Project Alliance Club (UMC), UMC, 2022 3rd Place among 32 teams

Research EXPERIENCE

System Software Laboratory, Korea University

Dec 2023 - Sep 2024

Undergraduate Research Assistant (Adviser: Assistant Professor Gyeongsik Yang) Seoul, Korea

- Led project on custom metric-based autoscaling in Kubernetes environments
- Contributed to 6G network systems project

Reproduced AI-based open-source project in Kubernetes environment

[link]

• Participated in paper reviews related to research topics

[link] [pdf]

• Conducted study related to Docker and Kubernetes

Individual In-Depth Study, Kyung Hee University

Sep 2024 - Dec 2024

Research Project (Adviser: Professor Euinam Huh)

Yongin, Korea

- Conducted in-depth research under supervision of advisor faculty member for one semester
- Led project on LLM fine-tuning and RAG system integration in federated learning environment
- Accepted at ICAIIC 2025 conference

Big Data Laboratory, Kyung Hee University

Dec 2022 – Feb 2023

Undergraduate Research Assistant (Adviser: Professor Changho Jihn)

Yongin, Korea

- Extracted and preprocessed human posture and joint data using Azure Kinect DK to analyze patterns of normal and abnormal postures
- Designed and trained neural network model (MLPClassifier) to classify correct and incorrect movements based on motion data
- Facilitated communication between Egyptian postdoctoral researcher and Korean student

EXTRACURRICULAR ACTIVITIES

EXTRACURRICULAR Military Service

Aug 2016 - May 2018

Auxiliary Police

Seoul, Korea

• Led team of auxiliary police officers, overseeing assignments and equipment management

AWS Cloud Clubs (ACC)

May 2023 – Aug 2023

Regular Member

Yongin, Korea

- Served as Co-Captain in club for students interested in Amazon Web Services (AWS) and cloud technology
- Prepared weekly presentation materials on cloud-related topics and assisted members with hands-on exercises [pdf]

AWSKRUG University Student Group (AUSG)

Aug 2023 – PRESENT

Regular Member

Seoul, Korea

- Shared insights on cloud services, including key concepts and practical examples, with club members
- Organized and participated in IT conference tailored for university students and junior professionals

Open Source Contribution Academy (OSSCA)

Jul 2023 - Oct 2023

Mentee

Seoul, Korea

- Translated 'Model' section of LLM Prompt Engineering Guide into Korean to improve accessibility for Korean developers [link][code]
- Prepared a glossary and established guidelines at the initial stage of the translation project to ensure consistency

National University Student IT Project Alliance Club (UMC)

Sep 2022 – Nov 2022

Regular Member

Seoul, Korea

- Developed back-end systems using Node.js
- Integrated Naver Book Search API and improved query performance by over 30x through Redis caching functionality
- Led back-end team, overseeing API development, database construction, and project scheduling

PROFESSIONAL TRAINING

Software Development Bootcamp

 $Jul\ 2022-Jul\ 2022$

Trainee

Seoul, Korea

Completed comprehensive Web Developer Training Program with modern web technologies
Front-end: HTML5, CSS3, JavaScript, and CSS frameworks (Bootstrap, Semantic UI)
Back-end: Node.js(Express), MongoDB
Built full-stack web applications implementing learned technologies

Kyung Hee Group Virtual Company IT/SW Internship Program Jul 2023 – Aug 2023 – Mentee Yongin, Korea

- Drafted IT service planning documents and designed web page structures
- Developed a web application using Python and Django

IT Job Bootcamp (Comento)

Sep 2023 - Oct 2023

Mentee

Seoul, Korea

• Hands-on experience with AWS cloud setup and operations

Configured AWS Free Tier environment with VPC and Bastion host

Deployed Kubernetes-based EKS and launched Nginx services

Implemented EFK (Elasticsearch, Fluentd, Kibana) stack for log monitoring and integrated CloudWatch alerts with Slack

Google Cloud Skills Boost

Jul 2023 - Aug 2023

Learner

Seoul, Korea

• Completed Kubernetes-focused training on Google Cloud Platform, including Foundations, Workloads, and Production tracks [link]

TECHNICAL SKILLS

Programming Languages Python, JavaScript, Java, C++, MySQL, MariaDB, HTML, CSS **Frameworks and Tools** Docker, Kubernetes, Node.js, PyTorch, Django, SpringBoot

LANGUAGE PROFICIENCY Proficient in **English** and Native in **Korean**

- IBT TOEFL: 81 (Reading: 18, Listening: 22, Speaking: 19, Writing: 22)
- MyBest: 86 (Reading: 22, Listening: 22, Speaking: 20, Writing: 22)

REFERENCES

Gyeongsik Yang

Assistant Professor

Department of Computer Science and Engineering at Korea University

Email: g_yang@korea.ac.kr — https://ss.korea.ac.kr/

Sungwon Lee

Professor

Department of Software Convergence at Kyung-Hee University

Email: drsungwon@khu.ac.kr — http://mobilelab.khu.ac.kr/wordpress/

Euinam Huh

Professor

Department of Computer Science and Engineering at Kyung Hee University

Email: johnhuh@khu.ac.kr — http://www.icnslab.net/#/home