Jincheol Jung

https://bik1111.github.io Google Scholar

Interests

Cloud/Edge Computing, Model-driven resource management, Ferderated Learning

EDUCATION

Kyung Hee University

Mar 2022 – Feb 2025

 $Undergraduate\ Student$

- 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

- Bachelor of Business Administration
- Total GPA of 2.97 / 4.5 (81.89 / 100)

Myongji College

 $Mar\ 2015 - Jun\ 2015$

Associate's Degree (Incomplete)

- Department of Theater and Visaual Arts
- Completed one semester of coursework
- Total GPA of 2.97 / 4.5

PUBLICATIONS

UNDER REVIEW

Jincheol Jung, Hongju Jeong, and Euinam Huh. 2024. Federated Learning and RAG Integration:

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

PUBLISHED

Jincheol Jung. 2024. Performance Analysis of Metric-Based Scaling in Kubernetes Environments: A Comparative Study of CPU Utilization and Custom Metric Approaches. *Korean Information Processing Society (KIPS)*. [pdf]

Jincheol Jung, Sungwon Lee. 2024. Performance Comparison Analysis of gRPC and zeroMQ for Efficient Library Selection in Chat Service Development. Korean Institute of Information Scientists and Engineers (KIISE). [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

1st Place in Google Hardware Hackathon, Google, 2024

Achieved 1st place out of 8 teams

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

Collaborated with College of Art and Design students and achieved 3rd place out of 20 teams **Special Award in SW-centered University Hackathon**, National Center of Excellence in Software, 2023

Placed 7th and received a special award involving 46 teams from 51 universities

Excellent Award in University Student IT Project Alliance Club (UMC), UMC, 2022 Secured 3rd place out of 32 teams

RESEARCH EXPERIENCE

System Software Laboratory, Korea University

Dec 2023 – Sep 2024

Research Intern (Adviser: Professor Gyeongsik Yang)

Seoul, Korea

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

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

Big Data Laboratory, Kyung Hee University

Dec 2022 – Feb 2023

Research Intern (Adviser: Changho Jihn)

- 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, South Korea

• Served as Squad Leader, overseeing squad members, duty assignments, equipment management

AWS Student Cloud Clubs (ACC)

May 2023 - Aug 2023

Regular Member

- Served as Co-Captain in club for students interested in AWS services 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

- 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

[pdf]

- 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

- Developed back-end systems using Node.js; secured 3rd place out of 32 teams in a project competition
- Led the back-end team, managing tasks related to API development and database system construction, as well as overseeing project schedules and team coordination

Professional Training

Software Development Bootcamp

Jul 2022 – Jul 2022

Trainee

[pdf

• Completed comprehensive Web Developer Training Program focusing on modern web technologies

Learned HTML5, CSS3, and modern JavaScript syntax for web development Gained practical skills in CSS frameworks like Bootstrap, Semantic UI, and Bulma Improved JavaScript skills in DOM manipulation and server-side programming with Node.js Developed full-stack applications using Express and MongoDB

IT Job Bootcamp (Comento)

Sep 2023 – Oct 2023

Mentee

[pdf]

• Gained practical experience in AWS cloud setup and operations

Configured cloud environment with AWS Free Tier, including VPC and Bastion host setup Deployed Kubernetes-based EKS environment and launched Nginx services Built EFK (Elasticsearch, Fluentd, Kibana) stack for log collection and monitoring Set up CloudWatch alerts with Slack integration for real-time resource monitoring

Google Cloud Skills Boost

Jul 2023 – Aug 2023

Learner [Link]

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

TECHNICAL SKIILS Advanced Python, JavaScript/TypeScript, Docker, Kubernetes, HTML, CSS

Moderate Node.js, PyTorch, Java, MySQL, MariaDB, Linux

Novice C

LANGUAGE English: IBT TOEFL 81 (MyBest Scores: R: 22, L: 22, S: 20, W: 22)

PROFICIENCY Korean: Native

REFERENCES Euinam Huh

Professor

Department of Computer Science and Engineering at Kyung Hee University

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

Sungwon Lee

Professor

Department of Software Convergence at Kyung-Hee University

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

Gyeongsik Yang

Assistant Professor

Department of Computer Science and Engineering at Korea University

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