# Jincheol Jung

https://bik1111.github.io/

Container Vitualization, Cloud Orchestration, Ferderated Learning Interests

EDUCATION Kyung Hee University Mar 2022 - Feb 2025

Undergraduate Student

- Bachelor of Science in Software Convergence
- Total GPA of 3.05 / 4.3 (87.8 / 100)

### Honors and AWARDS

### University Innovation Scholarship, Kyung Hee University, 2022

1st Place in Google Hardware Hackathon, Google, 2024

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

Special Award in SW-centered University Hackathon, Korea Information Science Society, 2023

Excellent Award in University MakeUs Challenge(UMC) Hackathon, UMC, 2022

### PUBLICATIONS

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), pp. 2087–2089. [pdf] [code]

### 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 Built Custom Metric-Based Autoscaling Environment with Prometheus Adapter and Grafana Analyzed Success Rate, 99% tail-latency, Pod count and CPU utilization under traffic load
- Participated in projects on 6G network system

Reimplemented AR/VR open-source project

[Link]

Participated in paper reviews related to research topics

[Link] [pdf]

• Conducted study related to Docker and Kubernetes.

[Link]

### 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 for motion tracking enhancement
- Facilitated communication between an Egyptian postdoctoral researcher and a Korean student

### Extracurricular Military Service ACTIVITIES

Aug 2016 – May 2018

Auxiliary Police, South Korea

### AWSKRUG University Student Group (AUSG)

Aug 2023 – PRESENT

Regular Member

- Presented cloud services with key concepts and practical examples.
- Organized and participated in an IT conference tailored for university students and junior professionals
- Participated in study groups for English and Database

## AWS Cloud Club (ACC)

May 2023 - Aug 2023

Regular Member

- Served as Co-Captain in a 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]

### Open Source Contribution Academy (OSSCA)

Jul 2023 – Oct 2023

[pdf]

[Link]

• Translated the "Model" section of the LLM Prompt Engineering Guide into Korean

• Defined translation conventions, including tone, glossary for loanwords, and techniques to avoid literal translation [code]

### University IT Alliance Club (UMC)

Sep 2022 - Nov 2022

Regular Member

• Led the backend-side team, responsible for API design and development, as well as ERD creation

• Collaborated and communicated with a team of 7 members to achieve project goals [code

### Comento IT Job Bootcamp

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

### Comento IT Job Bootcamp

Aug 2022 - Sep 2022

Mentee

[pdf]

Completed hands-on backend development training
Set up backend development environment, including GitHub, Eclipse, and MySQL
Developed API documentation for collaboration between frontend and backend teams
Built RESTful APIs using Spring Boot and implemented SQL queries for data retrieval
Consolidated API functions with SQL and Java code

### Software Development Bootcamp

Jul 2022 - Jul 2022

Trainee

[pdf] [code]

• Completed a 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

TECHNICAL SKIILS

Adavanced Python, JavaScript, TypeScript, Docker, Kubernetes, HTML, CSS Moderate Pytorch, C++, Node.js, SpringBoot(Java), MySQL, MariaDB

Novice C

Language Proficiency English: Upper-Intermediate (OPIC IH, TOEIC Speaking AL)

Korean: Native

REFERENCES