Jonghwan Park

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SUMMARY

Machine learning engineer/researcher with 2+ years of experience in efficient model training and inference tasks. Software engineering professional with 2+ years of experience in REST APIs, backend, and frontend development.

TECHNICAL SKILLS

Languages & Databases: Python, Java, React, Javascript, Typescript, SQL, MySQL, PostgreSQL Cloud & DevOps: AWS (S3, SES, Lambda, EC2), Docker, Kubernetes, Jenkins, Git PyTorch, Tensorflow, Spring Boot, FastAPI, Flask, REST API, GraphQL

EXPERIENCE

Winston Lab of Social Science and Innovation

Feb 2025 - Present

Software Engineer

Los Angeles, CA

- Served as the 2nd frontend engineer, collaborating with designers and contributing to backend development at times.
- Developed an Learning Management System (LMS) integrated with an educational AI agent to help students and instructors manage and resolve queries.

Skills: React, Javascript, Typescript, Spring Boot, Java, Python, RAG, LangChain, LlamaIndex, OpenAI, FastAPI

USC Information Sciences Institue

Jun 2023 - May 2024

Machine Learning Engineer

Los Angeles, CA

• Enhanced computation-efficient LLM inference (OPT, viBERT), using the SNIP pruning and model sharding for distributed execution, reducing inference time by 20%.

Skills: Python, Tensorflow, PyTorch, Numpy, NLP, Huggingface, Linux

Hanyang University Information and Intelligence Systems Laboratory

Feb 2021 - May 2022

Machine Learning Researcher

Seoul, Korea

- Proposed and implemented communication-efficient learning algorithms for federated online learning on DNN/CNNs.
- Reduced communication costs by up to 99% using quantization and sub-sampling (published 5 papers).

Skills: Python, Tensorflow, PyTorch, Optimization, Statistical analysis

LG CNS Jan 2019 - Feb 2021

Software Engineer

Seoul, Korea

- Led and built an integrated API system connecting mobile data plans with external partners like Netflix and Kia Motors, serving 80K+ users and generating over \$20M in revenue.
- Maintained and continuously developed a mobile service system with 300K+ DAUs, troubleshooting real-time issues. Skills: Java, Spring Boot, JavaScript, Microservices, REST APIs, SQL, Agile Development, Scrum

PROJECTS

Online marketplace (demo) (Docker, React, Typescript, Go, GraphQL, FastAPI, Open AI, PostgreSQL)

Jan 2025

• A web app for buying and selling items, featuring image recognition to auto-generate item specs and streamline listings.

Books Review Diary (demo) (AWS, Docker, Nodejs, Javascript, CSS, MongoDB)

May 2024

• A serverless full-stack app on AWS for book search, saving, reviews, and personalized recommendations.

EDUCATION

University of Southern California, Los Angeles, CA

Dec 2024

MS in Electrical & Computer Engineering - Machine Learning & Data Science (GPA: 4.0/4.0, MS Honors)