

샘플 - software Engineer

Jenny

Software Engineer

Based in Seoul 🇰🇷

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Stack

Kubernetes, Argo, Faiss, Milvus, Airflow, ELK, Redis, Kafka, Hadoop, HBase, TiDB @[For the details](#)



Selected Projects

GPU Cloud for Deep-Learning Inference

- Apache Mesos
 - Docker, Ansible, NVML
 - Python, Bash

GPU Cloud is a platform for deploying Deep-Learning inference. Based on information of GPU utilization with NVML(NVIDIA Management Library), developer and researcher could deploy multiple applications on a single GPU with scheduling algorithm that has made improve GPU server utilization.

Machine Learning Platform

- Apache Mesos
 - Docker, Ansible, Vue
 - Python, Go, Bash

Machine Learning Platform helps researchers train Tensorflow or PyTorch model experiments easily with command line interface and Web UI. The platform also has made improve GPU server utilization based on **GPU Cloud**.

Feature Vector Similarity based Search Engine

- Kubernetes, Docker
 - Hadoop, HBase, ELK, Prometheus, Grafana
 - Go, Scala, C/C++

Image Search Engine uses image feature vectors, HNSW(Hierarchical Navigable Small World) and PQ + OPQ(Optimized Product Quantization) for Approximate KNN Modeling.

It splits data into each shards for indexing through many nodes. If the feature vector has a large dimension, quantizing through OPQ, the nodes are able to store the larger data on memory.

Face Recognition SDK for mobile

- CoreML
 - OpenCV
 - Python, Swift, Objective-C, C/C++

Face Recognition SDK for mobile environments starts with face image stream input then works through on pipeline including deep-learning models of face detection, alignment for facial landmarks, feature extraction and recognition.

With the pipeline based on C/CPP, the SDK supports Android, iOS, Python interface with CoreML and NCNN frameworks both.

E-Commerce Recommendation System

- Kubernetes, Argo Workflow
 - Hadoop, HBase, Redis, Spark, ELK
 - Python, C/C++

E-Commerce Recommendation System is the first project I've taken on Kakao Corp. Therefore I got through a lot of moving the applications and batch jobs on bare-metal servers to Apache Mesos framework and then Mesos to Kubernetes. This project also gave me a lot of valuable lessons about huge data handling systems like batch jobs, Hadoop file system, HBase, Redis, Spark and real time API deployments.



Work Experience

2022

Machine Learning Engineer @[Daangn](#) , Seoul, *S.Korea*

2021-2022

Software Engineer @[LINE+](#) , Bundang, *S.Korea*

LINE+ ML Service Platform team is developing a recommendation system for LINE VOOM.

- Feature Vector Similarity Search Engine with Open Source @[Milvus](#)
- Deep-Learning model serving pipeline
- Internal Feature Store system like @[Feast](#) (TF Leader)

2019-2021

Software Engineer @[Kakao Enterprise](#) , Bundang, *S.Korea*

Kakao Enterprise is a company that provides AI services to companies spun off from Kakao's AI Lab department. David division, Vision Team, AI Lab at Kakao Enterprise is for massive image embedding vector search and facial recognition.

- Image Feature Vector Similarity Search Engine (Build own system)
- Cross mobile platform Face Recognition SDK (supporting iOS, Android)
- ML Pipeline for Celebrity Face Recognition & Identifier

2017-2019

Software Engineer @[Kakao](#) , Jeju, *S.Korea*

Multimedia Processing division, AI Lab at Kakao is for processing multimedia like video, image, music and voice with deep-learning.

- GPU Cloud for Deep-Learning Inference
- Machine Learning Platform for Training Neural Networks model
- E-Commerce CF & CB Recommendation System

2015-2016

Software Engineer & Co Founder @RISE (Startup Company), Pohang, *S.Korea*

- DIY Parts Recommendation System for proto-typing device.



Honors & Awards

2020

Excellence Award, @[OSS](#) , Seoul, *S.Korea*

Open Source Software Contribution for @[RustPython](#)

2019

3rd Place, @[Kakao](#), Pangyo, *S.Korea*

Kakao In-house 24K Hackerton

- Image Search with Text on Kakaotalk Messenger
- Chrome extension, automatically generating image descriptions for a blind to harness from VoiceOver

2016

Top 20, @[OSS](#), Seoul, *S.Korea*

Open Source Software Developers Challenge

- IOT Platform @[ENOW](#)

2015

Bronze Prize, @[ICISTS-KAIST](#), Daejeon, *S.Korea*

ICISTS-KAIST Team Project Award, Bronze Prize in All, Silver Prize in Robotics

Certificates

2021

Fundamentals of Accelerated Computing with CUDA C/C++, @[NVIDIA](#)

DLI C-AC-01 Certificate | Deep Learning Institute

Deep Learning Institute acknowledges achievements through certificates, which are awarded for course activities that Deep Learning Institute students complete.
courses.nvidia.com

2019

Launching into Machine Learning, @[Google Cloud Training](#)

Completion Certificate for Launching into Machine Learning

This certificate verifies my successful completion of Google Cloud's "Launching into Machine Learning" on Coursera
www.coursera.org

2018

Neural Networks and Deep Learning, @[DeepLearning.AI](#)

Completion Certificate for Neural Networks and Deep Learning

This certificate verifies my successful completion of DeepLearning.AI's "Neural Networks and Deep Learning" on Coursera
www.coursera.org

I'm available for interesting projects. See me in action.

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Thanks for reading! 🙌