
SUMMARY

Programmer of 6+ years of experience with demonstrated ability to adapt to new technologies to deliver values, ranging from cloud operations to machine learning.

EXPERIENCE

- **Skelter Labs (AI technology company)**

Software Engineer

Seoul, Korea

Jun 2018 - Present

Personalized Product Recommendation Solution

- **Developed the Web SDK** for signal collection and displaying recommendation widgets.
- Configured an **ML pipeline from data processing to serving in production** using Kubernetes, Spark, Argo Workflows, and MLflow.
- Integrated OpenFlagr to the serving stack for **model A/B testing**.
- **Operated the service with minimum downtime** using open-source tools including Prometheus, Grafana Dashboards, PagerDuty, Slack.
- **Configured the business dashboards** by integrating the ELK stack.
- Analyzed the performance bottleneck by integrating Jaeger Tracing and **optimized the response times**.
- **Configured and maintained the dev and production environments on GCP with the IaC approach** using Terraform. I maintained the flexibility of going down into provider APIs for testing and troubleshooting while benefiting from the reproducibility of the IaC approach.
- Continuously monitored the status and utilization of cloud infra and performed **cloud cost optimization**.
- As a person in charge of computer security, I studied and implemented the current cloud security best practices to ensure uninterrupted production of the team, ranging in the activities of configuring network firewalls, access policies, data encryption at rest and in transit, backups, secrets management, and container image scanning.

Audience Targeting Service PoC

- **Set up and operate Kubernetes cluster** to run Spark workloads to process ML data, and to serve Tensorflow models.
- **Integrated data from external services**, including Braze, Contentful, and BigQuery.

Context-based Personalization Application

- Participated in developing **stream processing backend** using Apache Kafka Streams API.
- Configured dev and production environments on AWS, and **configured the test/release pipelines to streamline the development**.

- **KOKOMO Games (mobile game company)**

Client-side programmer

Seoul, Korea

Jun 2016 - May 2018

- Developed game contents in Unreal C++ and Blueprint.
- Configured a CI system for automated mobile build (iOS and Android) and QA deployment, which greatly streamlined the build process. Up to 10+ builds a day.
- Integrated third-party libraries for user session and authentication functions for iOS and Android.
- Maintained custom engine modifications and integrated upstream updates using Git.

EDUCATION

- **Korea Advanced Institute of Science and Technology**

B.Sc. in Computer Science

Daejeon, Korea

2006 - 2012

- **Intern in the Collaborative Distributed Systems & Networks Lab:** Developed a prototype Android app that can recognize learned objects through built-in camera, using the OpenCV library.
- **Thesis:** Implemented a Predictive-corrective incompressible SPH for Realistic Fluid Simulation using the OpenCL API, utilizing parallel processing.

PROFESSIONAL SKILLS

- **Experience in backend development** using Python, Go, SQL, Kafka, MongoDB, Docker.
- **Experience in cloud operations:** GCP, AWS, networking, Terraform, Kubernetes, Prometheus, Argo Workflows.
- **Experience in machine learning projects** using Apache Spark, scikit-learn, Tensorflow, Keras.
- **Mid-level Industry Skills:** I can write testable and efficient code, have sufficient computer science knowledge.
- **Language skills:** Native in Korean. I can write and converse in English at a functional level.

CERTIFICATIONS

- TOEIC: score 990 (Listening 495, Reading 495), Speaking Level 6 (score 150) (2019)
- Test of English Proficiency developed by Seoul National University (TEPS): grade 1+, score 969 (2016)
- Engineer Information Processing by the Human Resources Development Service of Korea (2013)