# Jaewon Kwak

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## EXPERIENCE

Amazon

Vancouver, Canada

Email: sovioletta@gmail.com

Software Development Engineer

Sep. 2021 - Present

• **ACM-Automation Team**: Working on Supply Chain Optimization Technologies (SCOT) organization. Our team develops tools for automating the modeling of the transportation networks.

• NAVER Corp.

Seongnam, South Korea

Software Engineer, Big Data & AI Platform

Sep. 2018 - Sep. 2021

- **DevOps Logiss**: Logiss is an ELK stack for large scale search logs. It consisted with six clusters of over 1000 nodes deployed in Korea/Japan region.
- Logstash performance optimization: Testing and profiling Logstash on log-pipelining system. More than 100% improvement on throughput by adjusting GC parameters and Grok timeout.

• NEXON Korea

Seongnam, South Korea

Software Engineer, Data Infrastructure Development Team, Intelligence Labs

Jan. 2017 - Aug. 2018

- NxLog converter: Converts JSON file to structured Apache Parquet format. This app has automatic schema detecting and updating system. Fully dockerzied and auto-scaled on AWS.
- Fluentd optimization: Optimized Fluentd on log-pipelining system by profiling and adjusting the app/kernel parameters. With RSS(Receive Side Scheduling), About 30% improvement on throughput is achieved
- Fluentd TCP monitoring plugin: Developed monitoring plugin which shows TCP connection metric with event count per source address
- Building Elasticsearch ingest pipeline: Designed Elasticsearch pipeline and built on AWS with Kinesis and EC2.
- ITRI (Industrial Technology Research Institute)

Hsinchu, Taiwan

Intern, CCMA (Cloud computing Center for Mobile Application)

Jul. 2014 - Aug. 2014

• Auto-ballooning: Implemented auto-ballooning in QEMU-KVM. Performance testing was also completed.

#### **EDUCATION**

 $\bullet$  Ulsan National Institute of Science and Technology (UNIST)

Ulsan, South Korea

M.S. in Computer Science and Engineering (CSE)

Mar. 2015 - Feb. 2017

• Ulsan National Institute of Science and Technology (UNIST)

Ulsan, South Korea

Mar. 2011 – Feb. 2015

B.S. in Computer Science and Engineering (CSE)

## **Publications**

- Jaewon Kwak, Eunji Hwang, Tae-kyung Yoo, Beomseok Nam, and Youngri Choi "In-memory Caching Orchestration for Hadoop", In Proceedings of the 16th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID 2016)
- Youngmoon Eom, Jinwoong Kim, Deukyeon Hwang, Jaewon Kwak, Minho Shin, Beomseok Nam "Improving Multi-dimensional Query Processing with Data Migration in Distributed Cache Infrastructure", 21st IEEE International Conference on High Performance Computing (HiPC 2014)

## AWARDS

• Finalist, HPCAC-ISC 2014 Student Cluster Challenge

Jun. 2014

• Finalist, Asia student Supercomputing Challenge

Apr. 2014

• Finalist, Asia student Supercomputing Challenge

Apr. 2013