Byeongyong Go

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Education

Georgia Institute of Technology — Atlanta, GA
Master of Science - MS, Computer Science — *Aug 2022 - Dec 2023 (Expected)*

Seoul National University — Seoul, South Korea
Bachelor of Science - BS, Electrical and Computer Engineering — *Mar 2014 - Aug 2020*
* 2-year leave due to military service

Work Experience

Amazon Advertising — Palo Alto, CA
Software Development Engineering Intern — *May 2023 - Aug 2023*

- Implemented real-time log analysis solution for distributed Ads services, resulting in 70% cost reduction in visibility
- Created a unified metric/log dashboard that automatically detects new metrics from multiple servers and support one-line-change new server onboard utilizing AWS CloudWatch, IAM, CDK/SDK
- Developed a dynamic log sampler that can be seamlessly integrated with log4j and deployed across backend services

SK Hynix — Icheon, South Korea
Software Engineer/Design Engineer — *Jul 2020 - Aug 2022*

- Led the development of a company-wide fast memory simulator which decreased development cycle of a phase by more than 30% and played a critical position for generating $36.35 billion in annual revenue
- Created an ML-based analyzer for detection and re-generation of malicious system workload patterns
- Owned multiple in-house tools for automation and big data processing, enhancing engineering experience
- Won an Outstanding Member Award and contributed to the publication of a top-tier IEEE paper, 7 US patents

Academic Experience

Georgia Institute of Technology — Atlanta, GA
Graduate Research Assistant — *Aug 2022 - May 2023*

- Conducted empirical research in micro-architectural side-channel attacks under guidance of Prof. Daniel Genkin
- Developed a heavy memory access software to bypass systematic protections, utilizing kernel drivers and fuzzing

Seoul National University — Seoul, South Korea
Student Researcher — *Dec 2019 - June 2020*

- Developed an embedded system using C on a TI microcontroller to facilitate digital signal processing
- Designed a specialized PCB board to support peripheral logic control and Bluetooth transmission

Projects

Distributed Key-Value Store System | *C++, gRPC*

- Developed a distributed NoSQL key-value in-memory store system with built-in failure resiliency, sharding, multi-threaded workers, and gRPC sync/async calls, resembling Amazon's DynamoDB

YouTube Clone | *Spring, Angular, MongoDB, AWS S3*

- Implemented a YouTube replica with full application features, leveraging a pipeline approach with MongoDB and AWS for storage and retrieval

Technical Skills

Language: C++, Java, Python, Javascript | **Web/Utilities**: React, AWS, MongoDB, Docker, Shell, Git, SQL

Selected Courseworks

Distributed Systems	Advanced Operating Systems	High Performance Computing	Advanced Computer Architecture
Compiler Design	Computer Networks	Advanced Algorithm	Applied Cryptography