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*

WORK EXPERIENCE

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

- Implemented a real-time logging solution for distributed Amazon Advertising services, resulting in a 70% cost reduction in visibility.
- Developed a dynamic log sampler that can be seamlessly integrated with log4j and deployed across backend services.
- Created a unified dashboard with a CI/CD pipeline using AWS CDK/SDK and CloudWatch, showcasing essential system metrics and log metrics.

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 low-latency heavy memory access software with fuzzing to bypass OS and micro-architectural protections, utilizing kernel drivers

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

- Led the development of a company-wide memory simulator critical for generating \$36.35 billion in annual revenue
- Created an ML-based framework for risk assessment of system workloads, which involved detecting and regenerating malicious penetration patterns
- Created multiple in-house tools in C++ and Python for automation, system workload analysis, accelerating one phase of the product development cycle by over 30%
- Contributed to the publication of a top-tier IEEE paper, 7 US patents, and received the Outstanding Member Award

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

Proficient: C++, Java, Python, Shell | **Familiar**: Javascript, AWS, SQL/NoSQL, Git, C, Assembly

SELECTED COURSEWORKS

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