

ByeongYong (B.Y.) Go

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EDUCATION

Georgia Institute of Technology

Master of Science - MS, Computer Science

Atlanta, GA

Aug 2022 - May 2024 (Expected)

Seoul National University

Bachelor of Science - BS, Electrical and Computer Engineering

*2-year leave due to military service

Seoul, South Korea

Mar 2014 - Aug 2020

Achievements: Outstanding Member Award, Innovative Patent Award @ SK Hynix • National Science and Engineering Scholarship @ Korea Student Aid Foundation

EXPERIENCE

Amazon

Software Development Engineering Intern

Palo Alto, CA

May 2023 - Aug 2023

- Implemented a real-time logging solution on distributed Amazon Advertising services, reduced visibility costs by 70%
- Developed a dynamic log sampling module that can be generally integrated and deployed across backend services
- Created a unified dashboard on AWS CloudWatch to display major metrics from the backend services
- Utilized AWS CDK to manage resources in a scalable manner and controlled credentials using AWS IAM

Georgia Institute of Technology

Graduate Research Assistant

Atlanta, GA

Aug 2022 - Present

- Conducted empirical research in microarchitectural side-channel attacks under Prof. Daniel Genkin
- Developed attack programs using C++, and Rust or modify kernel to bypass OS and micro-architectural protections

SK Hynix

Software Engineer

South Korea

Jul 2020 - Aug 2022

- Led the development of company-wide memory simulator which is essential for \$36.35 billion of revenue every year
- Developed multiple in-house tools in C++ and Python related to system workload analysis to accelerate one step of the product development cycle over 30%
- Conducted 5+ successful JEDEC committee meetings with global client vendors, supporting key business strategies
- Published a top-tier IEEE paper and 7 US Patents. Won the Outstanding Member Award by Executives

Seoul National University

Student Researcher

Seoul, South Korea

Dec 2019 - June 2020

- Developed embedded system with C on TI microcontroller to utilize digital signal processing
- Designed specialized PCB board to support peripheral logic control and Bluetooth transmission

PROJECTS

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

- Developed a distributed NoSQL key-value in-memory store system with failure resiliency including sharding, multi-threaded workers and gRPC sync/asnc calls, similar in functionality to Amazon's DynamoDB

Edge IPC platform | C++

- Built a low-level inter-process communication client/server protocol and interface targeting low-resource edge devices. Leveraged knowledge and skills of load balancing, multi-threading, message queue and shared memory.

YouTube Clone | Spring, Angular, MongoDB, AWS S3

- Developed an YouTube replica including all application features enabled using pipeline with MongoDB and AWS

TECHNICAL SKILLS

Proficient: C++, Java, Typescript, Python, Shell | **Familiar:** AWS CDK, 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
Digital Circuit Design	Digital Signal Processing	Quantum Mechanics	Advanced Engineering Mathematics