

# 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 (Expected)*

### Georgia Institute of Technology

*Graduate Research Assistant*

Atlanta, GA

*Aug 2022 - Present*

- Conducting empirical research in microarchitectural side-channel attacks under Prof. Daniel Genkin
- Developing 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/async calls

### C Compiler | C

- Built a compiler with C for a personalized programming language, with the book "Crafting Interpreters"

### YouTube Clone | Java, Spring, Maven, JavaScript, Angular, MongoDB, AWS S3

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

## LEADERSHIP

- Vice President of club for unions of University, lead/organize group Bible study and volunteer activity with ~60 people

## TECHNICAL SKILLS

**Proficient:** C++, C, Python, Shell

**Familiar:** Java, SQL/NoSQL, Git, Assembly, Javascript, Web(Spring, React), AWS

## 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