

Minkyu Song

4th Year Computer Engineering Student at UBC
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SKILLS

LANGUAGES & FRAMEWORKS

C • TypeScript • JavaScript • Java
Verilog • HTML • CSS • XML • Android
React Native • ExpressJS (NodeJS)

OTHERS

Algorithm Design • Data Structures
GDB • Git • ModelSim • \LaTeX
Quartus II • IDA Pro • Android Studio

SOFT SKILLS

Bilingual (English, Korean)
Leader • Initiator • Communicator

EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

BACHELOR OF APPLIED SCIENCE

Exp: Apr '22 | Vancouver, BC
Major in Computer Engineering 4th Year

UNIVERSITY OF VICTORIA

GENERAL ENGINEERING

Victoria, BC
Transferred to the University of British Columbia after 1 year of studying general engineering topics.

COURSEWORK

UNDERGRADUATE

Computer Architecture
Operating Systems
Software Engineering
Intermediate Algorithm Design
Cybersecurity

WORK EXPERIENCE

JAVASCRIPT TUTOR

SELF-EMPLOYED

One-on-one tutoring with a brand new coder teaching basic concepts such as if, else branching looping, functions, etc.

LINKS

Github: github.com/smkjason
LinkedIn: [linkedin.com/in/minkyusong](https://www.linkedin.com/in/minkyusong)
Portfolio: smkjason.github.io

INTERESTS

Machine Learning • Robotics
LiDAR sensors & 3D Data
Computer Architecture • Investing
European Soccer • NBA • E-Sports

PROJECTS

JARVIS | MEETING SCHEDULER

Fall 2019 | Native Android App

- Built in Native Android App (Java and JavaScript) that finds time that works for the most people in their group based on their Google Calendar schedule.
- Implemented and designed the UI using XML and Java. This includes Activities, Layouts, Intents, Fragments and more.
- Handled all HTTP requests to the backend server.
- Designed the algorithm that finds a common free time by analyzing everyone's schedule.

CACHE/PIPELINE SIM | COMPUTER ARCHITECTURE

Fall 2020 | Simulation in C

- Modeled Direct-Mapped, n-way Set Associative, Victim Caches to get insights to their effects and improvements of a simulated CPU.
- Utilized GDB debugger to debug memory manipulation, pointers and other useful states of data to ensure correct behaviour.

AUTHK-9 | JWT SECURITY INSPECTOR

Fall 2020 | Chrome Extension

- Built a Chrome extension that analyzes a websites handling of JSON Web Tokens(JWT) for any potential vulnerabilities of attacks such as CSRF, XSS in JavaScript.

VPN | PRIVATE AND PROTECTED NETWORK

Fall 2020 | Desktop Application

- Created a VPN, in JavaScript, in which one machine can mutually authenticate with another machine and can send and/or receive data.
- Utilized secure crypto algorithms and hash functions such as AES-256, HMAC-SHA256 to maintain Confidentiality and Integrity of the messages.

INGRADEIENT | INGREDIENT ANALYZER

Spring 2020 | React Native App

- Built an App, by using React Native, that gives environment and health related information of a product by reading the picture the user has taken.

DESIGN TEAMS & CLUBS

UBC ENVISION | INSTRUMENTATION ENGINEER

Sept 2020 - Current

Participating in the development of IoT system that monitors and automates the beer brewing process by using technologies such as Python, Raspberry Pi, and other sensors.

KOINONIA | TREASURER

March 2019 - March 2020 | UBC

Managed all financial activity done by the club. Planned and organized all activities by having weekly meetings, continuous communication with other parties.

AKCSE | ACADEMIC EXECUTIVE

Sept 2018 - April 2019 | Ithaca, NY

Organized and planned all academic-related meetings and events held by Association of Korean Canadian Scientists and Engineers(AKCSE) club at UBC.