

Justin Cho

Software Engineer

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EDUCATION

University of British Columbia

Sep 2018 - May 2023

Bachelor of Applied Science, Biomedical Engineering

Relevant Coursework: Data Structures and Algorithms, Principles of Software Construction

WORK EXPERIENCE

Amazon

May 2021 - Aug 2021

Software Development Engineer Intern

Remote

- **Built and deployed production-ready REST APIs** using **Java** and **AWS** to improve the Alexa skill development experience across various [Alexa Skills Kit](#) platforms, a development framework with **900,000+** developers
- **Spearheaded the design and implementation** of a cursor-based API pagination feature by driving multiple design meetings and collaborating with senior engineers to ensure internal design requirements were met
- Developed a URL-safe token-transfer service written in **Java**, to securely create and transmit JSON encoded data by leveraging symmetric key encryption via **AWS KMS** and **Jackson** modules for data-binding
- Improved response times of API endpoints by **~38%** by integrating caching via **Cloudformation** templates

PROJECTS

Tweet Stream

- Built a serverless data pipeline using **Python** and **AWS Lambda** to process and analyze tweets in real-time
- Integrated **Kinesis Firehose** streams to reliably buffer and continuously load streaming data into **S3** buckets
- Designed the infrastructure of data flow by developing **IaC** (infrastructure as code) using **AWS Cloudformation**

Wiki Server

- Developed a **Java** server application to retrieve and deliver Wikipedia page requests using the Jwiki API
- Implemented a time-dependent **LRU cache**, optimized for multiple users through concurrent programming
- Achieved **95%** branch and code coverage with the **JUnit** testing framework through unit testing

PokeNest

- Built a bot written in **Python** that simulates a basic Pokemon game, running in the Discord environment
- Implemented an internal trading system and integrated server-side logic to handle core features of the game

Noteable

- Created a web application that allows users to convert hand-written text into a downloadable text file
- Utilized **Google Cloud Platform** for handwriting detection, integrated with core UI components using **React**

SKILLS

Programming Languages: Java, Go, Python, JavaScript, HTML, CSS

Technologies: AWS, Docker, MongoDB, Dagger 2, JUnit, Git