

# Haydn Keung

2B Honours Software Engineering, University of Waterloo  
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## SKILLS

### LANGUAGES

Java • Python 3 • C++ • Groovy •  
C# • Shell • SQL

### Tools:

AWS • Terraform • Jenkins • Docker •  
Android • Splunk • MySQL • Packer •  
Slack API

## COURSEWORK

### UNDERGRADUATE

Compilers  
Unix Tools and Scripting  
ARM Assembly  
Multivariate Calculus  
Linear Algebra  
Statistics & Probability  
Digital Circuits  
Formal Verification  
Computer Architecture

## ACCOMPLISHMENTS

### CERTIFICATIONS

2020 AWS Cloud Practitioner

### Awards:

2018 President's Scholarship of  
Distinction

2018 BC District Scholarship

2018 UBC Physics Olympics

## EDUCATION

### UNIVERSITY OF WATERLOO

#### SOFTWARE ENGINEERING

Sep 2018 - Apr 2023 | Waterloo, ON

## LINKS

Github:// [haydnkeung](#)

LinkedIn:// [haydnkeung](#)

## EXPERIENCE

### TRENDMICRO | CLOUD INFRASTRUCTURE ENGINEER

Jan 2020 – Apr 2020 | Ottawa, ON

- Wrote **Terraform** modules that are used by more than 100 engineers for managing/creating permission policies and resources on cloud providers
- Removed unutilized AWS resources by redesigning in-house tag compliance tool using **Lambda** and **Kinesis**, decreasing AWS usage costs by 75%
- Implemented highly scalable infrastructures by baking golden images using **Packer** for auto-scaling groups and load balancers
- Used **Splunk** to create a dashboard providing near real-time analytic of service uptimes and pre-deployment test results

### MADOOR | SOFTWARE ENGINEER INTERN

May 2019 – Aug 2019 | Vancouver, BC

- Implemented a payment system for the **Android** app supporting Google Pay, WeChat Pay and PayPal processing up to \$500 per transaction
- Developed an internal tool using **Java** and **Groovy** to automate pre-deployment tests, reducing deployment time by more than an hour
- Implemented in-app caching, reducing loading time by nearly 50%
- Built a UI rendering library using Java, increasing the rendering speed by 3x

### NORTH GROWTH MANAGEMENT | IT SUPPORT TECHNICIAN

May 2018 – Aug 2018 | Vancouver, BC

- Worked with database administrator to connect new computers to a **MS SQL** database
- Installed and configured a Windows 2012 server for keeping track of client information and financial data

## PROJECTS

### PATENT EXCHANGE | STOCK MARKET SIMULATOR

Feb 2020

- Built a stock market simulator using Solace Pub/Sub Event broker API
- Created an Android App for users to purchase shares from different companies
- Created algorithm to populate database with random data

### CHATIFY | ONLINE CHATTING FORUM

Aug 2019

- Built an online chatting forum using RESTful principals
- Created a database in **PostgreSQL** for storing chat history
- Wrote function for cleaning input data to prevent SQL and XSS injection attacks

### SPACE SHOOTER | ONLINE MULTIPLAYER SHOOTER

Dec 2018

- Built a 2D multiplayer space simulation game
- Configured networking to host the game on cloud using Photon Networking API
- Wrote interpolations to predict movement of game objects, reducing lag due to network latency