|  |  |  |
| --- | --- | --- |
| Haydn Keung | haydnkeung.github.io | github.com/haydnkeung |
| hkeung@uwaterloo.ca | linkedin.com/in/haydnkeung |

**Languages:** Java • Python • C++ • Groovy • C# • Shell • SQL

**Tools & SDKS:** AWS • Terraform • Jenkins • Docker • Android • Splunk • MySQL • Packer • Unity3D

# Experience

### **Site Reliability Engineer** | Trend Micro Inc. Jan 2020 – Apr 2020

*Python, Java, AWS, Jenkins, Terraform, Docker*

* Built Terraform modules and Jenkins jobs used by over 100 engineers to automate creation of development infrastructure
* Reduced AWS expenses by 50% by implementing a serverless cloud management tool monitoring and remove unused resources
* Created dashboard with real-time analytics of system performance by wrangling AWS logs and building data streams using Kinesis, Splunk and Python
* Implemented an OSI layer 3 (network layer) firewall for private subnets

### **Software Engineer Intern** | Madoor International Inc. May 2019 – Aug 2019

*Java, Kotlin, Android, MySQL*

* 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

### **IT Support** | North Growth Management Ltd. May 2018 – Aug 2018

*MS SQL*

* 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

### **Chatify** Aug 2019

*Python, Flask, PostgreSQL*

* 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

### **Online Multiplayer Shooter** Dec 2018

*C#, Unity Engine, Photon Networking*

* 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

# Achievements

### **AWS Certified Cloud Practitioner** Feb 2020

* Validation Number SG7MPFX2HE1E1MCJ

# Education

### **Candidate for Bachelor of Software Engineering** Sep 2018 – Apr 2023

* University of Waterloo