

Haydn Keung

2B Honours Software Engineering, University of Waterloo
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LANGUAGES

Java, Python, C++, Groovy
 C#, Shell, SQL

TOOLS & SDKS

AWS, Terraform, Jenkins
 Docker, Android, Splunk
 Jupyter, MySQL, Unity3D

COURSEWORK

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

CERTIFICATIONS

2020 AWS Solution Architect (Associate)
 2020 AWS Cloud Practitioner

AWARDS

2018 President's Scholarship
 2018 BC District Scholarship
 2018 UBC Physics Olympics

LINKS

Github:// [haydnkeung](#)
 Kaggle:// [haydnkeung](#)
 LinkedIn:// [haydnkeung](#)

EDUCATION

UNIVERSITY OF WATERLOO

SOFTWARE ENGINEERING
 Sep 2018 - Apr 2023 | Waterloo, ON

EXPERIENCE

TRENDMICRO | SITE RELIABILITY ENGINEER

Jan 2020 – Apr 2020 | Ottawa, ON

- Built **Terraform** modules and **Jenkins** jobs used by over 100 engineers to automate creation of development infrastructure
- Reduced monthly AWS expenses by \$60,000 by implementing a serverless cloud management tool on **AWS** 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 using **Java**

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 DB administrator to connect **MS SQL** DB to corporate network
- Installed and configured a Windows 2012 server for keeping track of client information and financial data

PROJECTS

CONNECT-4 | COMPETITIVE GAME AI

May 2020

- Built an AI to play connect-4 using reinforcement learning, **Python, Numpy and Tensorflow**
- Creating heuristics using game theory to train AI through self-play
- Competed in online competitions against other AIs on Kaggle placing 74/394

CHATIFY | ONLINE CHATTING FORUM

Aug 2019

- Built an online chatting forum by creating RESTful APIs using Flask
- Created a **PostgreSQL** DB for storing chat history
- Implemented security module for cleaning inputs against SQL and XSS injection attacks

SPACE SHOOTER | ONLINE MULTIPLAYER SHOOTER

Dec 2018

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