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 Cloud Practioner

AWARDS

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

EDUCATION

UNIVERSITY OF WATERLOO
SOFTWARE ENGINEERING
Sep 2018 - Apr 2023 | Waterloo, ON

LINKS

Github:// **haydnkeung**
Kaggle:// **haydnkeung**
LinkedIn:// **haydnkeung**

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 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 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 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

CONNECT-4 | COMPETITIVE GAME AI

May 2020

- Built an AI to play connect-4 based on reinforcement learning techniques, **Python, Numpy and Tensorflow**
- Competed in online competitions against other AIs on Kaggle placing 191/381
- Trained AI by creating heuristic based algorithms to challenge the AI

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