Haydn Keung

haydnkeung.github.io
hkeung@uwaterloo.ca
github.com/haydnkeung
linkedin.com/in/haydnkeung

Languages: Java, Python, C++, Groovy, Shell, SQL
Tools & SDKS: Jenkins • Tensorflow • Splunk • MySQL • Packer • Unity3D
Cloud/Infrastructure: AWS • GCP • Terraform • Docker • Kubeflow

Experience

ML Engineer/BI Developer | Square Enix Inc.   Sep 2020 – Dec 2020

Python, GCP, Tensorflow, Kubeflow, Apache Beam
- Design and created ML pipelines using Tensorflow Extended, Kubeflow and GCP to extract data from data warehouses and continuously training new models
- Implemented deep learning models using Tensorflow to estimate the likelihood of users unsubscribing from various services
- Created ETL pipelines using Apache Beam to, clean, wrangle and prepare data for ML.

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 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 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

Projects/Achievements

AWS Certified Solution Architect   May 2020
- Certified (901/1000)

Connect-4   May 2020

Python, Numpy, Tensorflow
- 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

Education

Candidate for Bachelor of Software Engineering   Sep 2018 – Apr 2023
- University of Waterloo
- Relevant Courses:
  - Intro to Mathematical Optimization (CO 250)
  - Intro to Data Structures (CS 241)
  - Intro to Combinatorics (Math 239)