ALLEN HUANG

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EXPERIENCE

Software Developer Intern – Capital One   January – April 2017

- Developed deployment pipeline reducing deployment time from 2 weeks to 30 mins
- Wrote and updated multiple infrastructure modules using Ansible, Bash, and AWS
- Built scalable and resilient infrastructure to host and deploy content using Terraform scripts
- Ensured 99.9% uptime with cross-region replication, DDos-prevention, and CDN caching
- Created 30 webpages using AngularJS, embedded JavaScript, Contentful, and Node.js

Research Assistant – University of Waterloo   May – August 2016

- Developed algorithms for data analysis and machine learning in R and C++
- Investigated various branches of machine learning such as Markov Models, and Neural Nets
- Implemented methods for data analysis including Wavelet Packets and Fourier Transforms
- Benchmarked and optimized machine learning algorithms using concurrent programming
- Wrote extensive documentation and detailed reports for code and performance results

SKILLS

- **LANGUAGES**: C++, Bash, JavaScript, Java, R, HTML, Sass, Ansible, Terraform, Python
- **TOOLS/SERVICES**: git, Amazon Web Services, Jenkins, Akamai, Contentful, Docker
- **FRAMEWORKS**: Node.js, AngularJS, Embedded JS, React, Android, Bootstrap

PROJECTS

Handwriting Character Recognition

- Developed a handwriting recognition software for single characters
- Compares similarity of two characters by computing their Euclidean distances
- Predicts characters using the k-nearest neighbors algorithm with 90% accuracy

WhatBroke Web App

- Created a digitalized room condition form to collect information and generate reports
- Built front-end interface using React, CSS, and Bootstrap

Pacman Game

- Created a replica of the game Pacman as a Java Applet with Object Oriented Programming
- Designed a pathing algorithm for ghosts to return to spawn location upon death
- Animated objects using timers, sprites and displayed them using the Java paint class

EDUCATION

University of Waterloo – Computer Engineering   2015 – 2020

INTERESTS

- Foosball, Badminton, Table Tennis and Squash
- Board games such as Avalon, Settlers of Catan and Citadels