Matthew Chow

Software Engineer / Computer Engineering @ UBC

Contact

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Education

University of British Columbia

BASc Computer Engineering

2018 - 2023

GPA: A-, Deans Honour List

Skills

Languages

JavaScript Python
Java HTML
CSS C++

Tools

AWS Express
MongoDB React
Git Jira
Ansible Netlify

Courses

Machine Learning & Data Mining Software Engineering Data Structures and Algorithms Mathematical Proof

Extracurriculars

Inter-varsity Christian Fellowship (Service Team Lead) Wushu (Chinese Martial Art -Competed in Nationals) UBC Solar

Experience

Incoming Software Engineer Intern / League

May 2021 - August 2021

- Working on the Platform Backend team to enable a data-driven platform that provides a hub for employees to engage in health, lifestyle and benefit programs

Software Developer Intern / SAP

September 2020 - April 2021

- Refactored a Jenkins Python pipeline that serves 1,000,000+ users in AWS, Alicloud, and Azure with OOP principles to allow for future versioning and configuration; utilized multithreading to decrease runtime by >25%
- Maintained a Java microservice by performing Root Cause Analysis on production issues; migrated functionality from deprecated dependencies and tested functionality in Python with Locust
- Initialized an Ansible playbook to configure Linux machines in SAP Converged Cloud
- Produced extensive documentation alongside UML diagrams for design, testing, and integration into production environments; justified benefits of design with respect to user, security and time requirements

QA Engineer Intern / Perk Labs

July 2020 - August 2020

- Boosted development output by developing UX features in React Native
- Strengthened UI/UX design by identifying pain points in transaction flows and suggesting readability improvements based on user centered design
- Delivered an optimal experience for 5000+ users with regression, integration, and unit tests

Projects

ImageStash

- Developed a full stack image repository application with React and Express to handle storage of user images; operated on an EC2 instance
- Managed user authentication with Google OAuth 2.0; stored user information and images in S3 and a MongoDB Atlas cluster

Pilldex / (4th Place in 2020 Software Engineering Year)

- Constructed the backend for a pill tracking app that helps users keep track of pills by dynamically scheduling reminders based on user behaviour
- Established a RESTful API with Express on an EC2 instance; verified correctness by creating a test suite with Jest, achieving 100% line and branch coverage

Foex / nwHacks2020 (Wolfram Award Top 35/145)

- Mitigated food waste by calculating and logging expiry dates for users from images with a Java Android app
- Extracted colour and object information from images to classify and determine an expiry date with the Microsoft Azure Computer Vision API