MICHAEL HE

SKILLS

Languages Java C/C++ JavaScript TypeScript HTML/CSS Python Scala Go

Technologies React Flask Next.js Node.js Express.js Apollo Docker Git/GitHub AWS

 Databases
 PostgreSQL
 MySQL
 Firebase
 GraphQL
 MongoDB

EDUCATION

University of Waterloo, ON

BACHELORS OF COMPUTER SCIENCE

2019 - 2024

- Average: 93%, Major Average: 95%, GPA: 3.96/4.0
- Data Structures & Algorithms Advanced (94%), OOP Enriched (94%), Compilers Enriched (99%), Statistics (97%)
- Nortel Institute Scholarship (\$3500), President's Scholarship of Distinction (\$2000), Joe C Lee Math Scholarship (\$1200)

EXPERIENCE

A Thinking Ape

Vancouver, BC

SOFTWARE ENGINEER INTERN (ONGOING)

SEP 2021 - PRESENT

• Building community-driven games with millions of players

Wish San Francisco, CA

SOFTWARE ENGINEER INTERN

MAY 2021 - AUG 2021

- Built a service adopted by 10,000+ merchants to store their items at Wish warehouses using React, Go, and GraphQL
- Implemented an address book feature to allow Wish Parcel users to save addresses, increasing users by 2,000+
- Created REST endpoints and GraphQL queries using Go to filter 25,000+ shipments, increasing performance by 50%
- Developed localization CI/CD pipelines with Gitlab to extract and translate 3,000+ strings from Wish services
- Wrote unit, integration, and E2E tests using Nightwatch.js to increase coverage by 15%

Workplace Safety & Insurance Board - Innovation Lab

Kitchener, ON

FULLSTACK DEVELOPER INTERN

JANUARY 2021 - APRIL 2021

- Built a secure authentication system to issue credentials for 324,000 WSIB clients using React and Flask
- Created a chatbot to assist 5,000,000+ clients file insurance claims using Dialogflow
- Implemented a redesign of the lab website using **React**, improving accessibility and responsiveness

Hubdoc - A Division of Xero

Toronto, ON

SOFTWARE DEVELOPER INTERN

MAY 2020 - AUGUST 2020

- Developed containerized web-scraping microservices for 10,000+ clients using Node.js, Nightmare.js, & Puppeteer.js
- Improved document-fetching success rate by up to 80% by handling bot detection and refactoring legacy code
- Implemented intranet features to control AWS EC2 instances using Handlebars.js, Backbone.js and PostgreSQL
- Wrote unit tests using **Chai** and **Mocha**, increasing coverage by **70%**

PROJECTS _

VM - (source available on request)

C++, NCURSES DECEMBER 2020

- Created a clone of vim, the command-line text editor, with all core features implemented (100+ commands)
- Followed Object Oriented Principles, using Observer, Command and Singleton Design Patterns to produce modular code

Relay - %

REACT, FLASK, TWILIO, MONGODB

MAY 2020

- Created an SMS service to access social media platforms without an internet connection
- Allowed users to send/receive messages, view notifications, and make posts on Twitter and Facebook

ShotSpot (Winner @StarterHacks2020)- %

Node.js, Express.js, Python, AWS

JANUARY 2020

- Built web app to recommend photo spots by scraping Instagram for photos/locations and storing them in an AWS S3 Bucket
- Won Most Promising and Best Use of AWS awards at StarterHacks 2020
- Added a feature to explore recommended locations virtually through Google Street View