

MICHAEL CHI

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Technical Skills

Languages: JavaScript, Java, Python, Scala, GraphQL, C#

Frameworks: Node/Express.js, Vue.js, React, AngularJS, ASP.NET

Tools: Linux, Git, Google Cloud (App Engine, Cloud Functions), Redis

Coursework: Computer Networks (TCP/IP, IP Subnetting), Compiler, Operating System, Algorithm & Data Structures

Work Experience

Freshii, Software Developer, Toronto, ON

Sep. 2018 – Dec. 2018

- Contributed to the development and launch of Freshii web app by shipping features in Vue.js, experiencing over 4 million user traffic and generating \$200,000 in online sales
- Introduced coding guidelines and process documentation for the team, while assisting team lead with implementing support processes
- Headed the development of Freshii backend API services, which automated email drip for franchising campaign and replaced the old career application process
- Developed a web portal client using React/Redux, which queried stores and sales data using GraphQL
- Created shell scripts to automate CI/CD with Codeship and API deployment to Google Cloud

Sortable, Software Developer, Kitchener, ON

Jan. 2018 – Apr. 2018

- Developed auto-logging features and report parser in Python for the new reporting platform, used by all internal staff and beta customers
- Designed a report scheduling system with Scala and AngularJS that applies CRUD operations to PostgreSQL, reducing manual tasks by 2hrs/day
- Built custom domain-specific language with JavaScript to encapsulate SQL queries, reducing error rates and querying time by 10%

IBM Canada Ltd., Software Developer, Toronto, ON

May 2017 – Aug. 2017

- Implemented RESTful API with Node to control SSO configurations and authentication, leveraging Redis to cache certificates
- Designed and built a Node/React-based IP Whitelist System, integrating with SFTP server and ICM web app for user authorization
- Wrote 50+ unit tests with Mocha framework to validate API endpoints, increasing code coverage by 23%

Scotiabank, Technical Analyst, Toronto, ON

Sep. 2016 – Dec. 2016

- Developed a web application using C# to migrate Excel spreadsheets to SQL Server tables
- Optimized the querying algorithm of a reporting web application by 50% by utilizing stored procedures

Projects

Subscription Manager (ongoing)

- Developed API for authentication utilizing JWT, CRUD for subscriptions and database migration with Sequelize ORM

Computer Networks (academic)

- Simulated a router queue in Python, and measured its performance by observing packet losses
- Evaluated the performance of CSMA/CD Protocol by designing a discrete event simulator in Python, and measuring its efficiency and throughput

Exam Calendar

- Created a calendar using React and Waterloo Open Data API to summarize course exam times, used by a club of 70+ students to organize events

Education

University of Waterloo

B.ASc. Computer Engineering 2020

Sep. 2015 - Current