MICHAEL CAI

4A Electrical Engineer

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SKILLS

- Languages: **JavaScript**, **Java**, **HTML**, **CSS**, **SQL**, **C++**, **C#**, **Python**, **Golang**
- Tools & Frameworks: **React/React-Native**, **EmberJS**, **NodeJS**, **Docker**, **AWS**, **Jenkins**, **NoSQL**, **Kubernetes**

EXPERIENCE

SOFTWARE CONSULTANT INTERN | IBM CANADA LTD

Jan - May, Sept - Dec 2017 | Toronto, ON

- Led a multi-disciplined team on a full-stack development project using **React/Express/NodeJS** and **Bluemix Cloud Services**
- Reduced mobile application development time by **50%** without losing the native feel by using **React-Native**
- Provisioned **Hyperledger Composer** blockchain instances using **Docker** and managed with **Kubernetes** clusters
- Increased productivity by configuring **Jenkins CI** to run integration builds on feature changes and updates to the application as well as **Bluemix CD** for production and client demonstration builds
- Created **RESTful APIs** for simple and efficient with the application and the blockchain frameworks
- Hosted effective correspondences and technical presentations to help inform and create solutions for clients and senior executives in the conversational commerce space

AGILE SOFTWARE ENGINEERING INTERN | PIVOTAL LABS

May - Aug 2016 | Toronto, ON

- Developed the **Lincoln/Ford** Android app and boosted downloads by **30%** and achieved a **4-star** rating in the Play Store
- Improved application performance by implementing reactive programming with **RxJava** and **RxAndroid**
- Designed and developed with the **Model-View-Presenter** architecture and used **Dagger** for dependency injections

AGILE AUTOMATION ENGINEERING INTERN | PIVOTAL LABS

Sept - Dec 2015 | Toronto, ON

- Developed automation tests for various **Android** applications using **Espresso** and logged with **Pivotal Tracker** and **Jira**
- Performed exploratory testing on mobile devices in an **Agile/Extreme Programming** environment

PROJECTS

TESTIFY - INTERVIEWING DONE RIGHT!

May 2018 - Present | Fourth Year Design Project

- All-in-one service to facilitate take-home coding tests, eliminating the juggle of applicant data across scattered services
- Led frontend development in **EmberJS** for its architecture flexibility, awesome logic separation and fast rendering speed

RIDEBUDDY

Jan 2018 - Present | Mobile Application

- Designed and developed an **Android** and **iOS** application for university ride-sharing and carpools
- Mobile application built using **React-Native** and a **Python** backend, integrating **Facebook** and **Twilio**

NAMETHATNUMBER

April - July 2018 | Machine Learning Project

- Designed neural networks using genetic algorithms with graph generation systems to recognize grayscale images of handwritten digits from **MNIST** data set
- Implemented a proof-of-concept two-layer convolutional neutral network using **Python** and trained using the **Keras Sequential Model** and interfaced with **Tensorflow**

INFOEXTRACT

Jan - May 2015 | Windows Application | Hydro One Inc.

- Designed and created a Windows script using **C#** to sort and execute research data extraction tasks systematically, reducing process time by **95%**

EDUCATION

SEPT 2014 - PRESENT | UNIVERSITY OF WATERLOO

- Bachelor of Applied Science in Electrical Engineering (GPA: 3.7/4.0)
- **Relevant Courses:** Data Structures and Algorithms, Computer and Communication Networks, Cooperative and Adaptive Algorithms and Operating Systems