# Jim Zhu

# Skills Summary

- Languages: Java, C#, C++, C, JavaScript, SQL, ARM, Python
- **Technologies**: Node.js, React.js, Vue.js, Cordova, PostgreSQL, Firebase, Android, Arduino
- Tools: Git, SVN, Linux, MacOS, Android Studio, Visual Studio, Photoshop

### Education

#### **University of Waterloo** - Candidate for BASc Computer Engineering

Sept. 2015 - Apr. 2020

- Term Dean's Honours List for Winter 2016, ranked 7th out of 101 students
- Relevant Courses: Operating Systems, Algorithms and Data Structures, Embedded Microprocessor Systems, Digital Computers, Embedded Engineering Design

# Work Experience

#### **Hubdoc** - Software Developer

Sept. 2017 - Dec. 2017

- Built and maintained 70 web bots, driving overall success rates from 59% to 83%
- Developed an intranet dashboard using Backbone, C3, Express, and PostgreSQL
- Created an internal bot trader in React, prices bots based on volatility and importance

#### **SAP** - Software Application Developer

Jan. 2017 - Apr. 2017

- Constructed robust Arduino/R-Pi boards, used at the Hannover-Messe Industrial Fair
- Developed real-time industrial vibration demos using event-stream-processing
- Created a custom Java tool to analyze and stress-test OData servers

#### MHS Inc. - Software Developer

May 2016 - Aug. 2016

- Revised database queries between C# and SQL Server, increasing speed from 5s to 300ms
- Developed and demoed API changes to top level management using a native Android app
- Designed and built an internal networking app from scratch using Cordova and Firebase

## **Projects**

#### **Investermate**

- Designed and developed an investment chatbot for Hack the 6ix
- Aggregated and presented data from Bloomberg's API using Google's Dialogflow and Node.js

#### J-OSU

- Developed a rhythm game capable of reading custom song files in Java
- Incorporated custom game loops to minimize delays between audio and visuals

#### **Dead Reckoning Navigation App**

- Created a native android app that tracks movement on a map using only onboard sensors
- Implemented an A\* algorithm to find the shortest path on any SVG map

#### Sketch My Thing

• Worked with a team to create a multiplayer drawing game using Vue.js, Postgres, and Go