Joe Zeng

2B Computer Science

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Skills

- Languages: Java, Python, C, C++, JavaScript, HTML, CSS
- Frameworks and Libraries: jQuery, React.js, Angular.js, Bootstrap, Robolectric
- Development Tools: Git, Android Studio, Gradle, UNIX, SSH, Bash, Vim

Experience

Connected Lab, Software Engineering Intern   Toronto, ON.
- Developed an Android App for a smart home audio system to control smart speakers,   Fall 2015
  implementing support for six different music providers and improving app performance
- Refactored and audited code for Canada's largest bank's mobile wallet app to
  improve code stability, security and performance
- Wrote unit tests to improve code stability and reduce regression bugs
- Wrote Gradle scripts to do automatic assertions and remove log statements for release builds

Projects

MyOrchestra - EngHack Project (*https://git.io/vtHpB*)   Waterloo, ON.
- Built a web app that allows users to conduct an orchestra using the Myo Armband
  through arm gestures controlling instrumentals on various devices through bluetooth
- Integrated sound commands with the Web App using React.js and Buzz.js
- The winning project at EngHack UWaterloo

TxtIR - UofT Hacks Project (*https://git.io/txtir*)   Toronto, ON.
- Constructed Text-based TV remote implementing phone to TV commands
- Used Twilio API to send text commands to an Arduino to send IR signals to a TV

TurnIT - Hack the North Project (*https://git.io/turnit*)   Waterloo, ON.
- Created Bluetooth motion-activated bike signal light with a Pebble Watch and Arduino
- Detected arm gestures with Pebble's accelerometer to control LED lights on the Arduino
- Designed and 3D printed the casing for the Arduino

TeamRacket - BattleHack Project (*https://git.io/vzW0e*)   Toronto, ON.
- Developed a web app that tracks a team's productivity and disincentivizes procrastination
  through monetary punishment
- Programmed the app to track user productivity using Rescuetime's API and charge
  unproductive team members using Paypal's Braintree API
- Implemented front-end using Angular.js

OpenCV Game - PennApps Project (*https://git.io/vzlEY*)   Philadelphia, PA.
- Created an OpenCV game that does facial recognition and prompts player to move their
  face to designated areas while avoiding danger zones within a time limit

Activities

Velocity Technology Incubator, Resident and Entrepreneur   Waterloo, ON.
- A startup residence and mentorship program for entrepreneurial students

University of Waterloo Varsity Tennis, Team Captain   Waterloo, ON.
- Led team to second place finish at OUA Finals
- 2015 OUA and University of Waterloo Rookie Athlete of the year

Education

Candidate for Bachelor of Computer Science, Co-op   Waterloo, ON.
University of Waterloo   2014 – 2019