# Ray Zhou

## hi@rayzhou.co | www.rayzhou.co

#### **Expertise**

Language: JavaScript, HTML/CSS, Python, Java, C

Technologies: React, Redux, Django, PostgreSQL, Data Science (Pandas, Scikit-learn), Android SDK

#### **Professional Experience**

Flair (Vancouver, Canada)

Jan 2018 - Present

## **Software Developer (Contract)**

- Implemented frontend components for a support dashboard to manage user data and visualize performance metrics, reduced average SLA for resolving tickets to 30 minutes (React/Redux)
- Fixed REST API performance issues and reduced database load through index and query optimization, resulted in reduced queries duration by 50%-500% (Python/PostgreSQL)

Next Thing Co.

Nov 2015 – Aug 2017

#### **Product Engineer**

- Led test automation framework design for use in mass-production of CHIP, the world's first \$9 computer, and performed on-site deployment at 3 contract factories in Asia
  - Reduced total test time by 4583 man-hours compared to no automation previously (Python)
  - Saved team over 400 man-hours in development time on tests for subsequent products through creation and refactoring of test program

Palette Gear (Kitchener, Canada)

Mar 2014 - Oct 2015

#### **Product Engineer & Co-Founder**

- Co-founded start-up with a team of 7, delivered on a Kickstarter promise to ship over 20k units in under 1 year, establishing the company's prototyping, manufacturing, sourcing and testing strategies
- Designed test strategies for the finished product and implemented scripts for functional tests (Python)

Sentry Scientific, Inc. (Kitchener, Canada)

Jun 2013 - Feb 2014

#### **Embedded Engineer & Co-Founder**

- Headed product design, investment engagements, and product marketing to potential distributors/customers
- Managed firmware development in C of a safety system for rolling walkers, resulting in patent sale of a design that prevented physical injury through reaction to changes in speed, orientation and user intention

Facebook, Inc. (Menlo Park, USA)

Sep 2011 – Dec 2011 / May 2012 – Aug 2012

#### **Power Test Engineer Intern**

- Reduced power supply qualification timeline by 10% through automation of test procedures (Python)
- Produced reports used in deployment decisions of 50k servers for the open compute rack & power team

#### **Projects**

Book Viewer Dec 2017

Server rendered frontend app used by 2000 users to receive reading material. (Django/Bootstrap/AWS)

Salary Predictor Feb 2018

Built machine learning models to predict future salaries based on job listing content (Python/Scikit-learn)

# **Advanced Instagram Search**

Nov 2017

Developed an Android app using Java with the latest SDK feature such as Volley and ConstraintLayout to enable multiple conditions search of a user's social media content on Instagram

### **Education**

University of Waterloo (Canada)

Apr 2013

# **Bachelor of Applied Science (Mechatronics Engineering, co-op program)**

Internship experience: Facebook, Christie Digital, BlueCat Networks