Ray Zhou

hi@rayzhou.co | www.rayzhou.co

Expertise

Language: Java, Python, Javascript, C/C++, SQL, HTML/CSS
Technologies: Django, React, postgreSQL, Data Science (Pandas, Scikit-learn), Android SDK

Professional Experience

Flair *Jan 2018 – Present*
Software Developer (Contract)
- Performed SQL tuning and reduced DB load through index and query optimization, resulted in reduced queries duration by 50%-500% (SQLAlchemy/postgreSQL)
- Implemented front-end elements for a customer support dashboard (React, Node.js)

Next Thing Co. (Oakland, USA) *Nov 2015 – Aug 2017*
Product Engineer
- Created automated test procedures for production of CHIP, the world's first $9 computer, at 3 contract factories in China
  - Architected and implemented tests on an embedded system that reliably tested 100k units (Python)
  - Saved team over 400 man hours in development time on tests for subsequent products through creation and refactoring of libraries

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*
Web app used by 2000 users of a church to deliver reading material. (Django/Bootstrap/Javascript)

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, utilizing Instagram's REST API

Education

University of Waterloo (Canada) *Apr 2013*
Bachelor of Applied Science (Mechatronics Engineering, co-op program)