

ZACHARY YIU

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EXPERIENCE

- Present | June 2017 **PICOYUNE**
Software Engineering Intern
- Single-handedly designed and developed all-new Android application to control the company's plasmonic mercury sensor over a Bluetooth connection. Following initial development, the application was implemented into the core product as the primary user interface to the sensor.
 - Maintain Android app and embedded sensor software and actively expand feature set.
- Present | April 2017 **UC BERKELEY STUDENT AFFAIRS I.T.**
Unit Supervisor
- Conducted hiring process for technical support consultant team with a record-high 250+ applicants, including 50+ one-on-one interviews.
 - Led in-depth specialty topic trainings for a team of over 30 consultants, which correlated to a doubling of successful recorded hardware repairs over the previous year.
- Present | Feb 2017 **DIVERSATECH AT BERKELEY**
Technology Consultant
Fall 2017 Client: Smartex
- Developed an online chatbot service in collaboration with a team of developers and data analysts to meet the demand of agricultural information queries of farmers in West Bengal.
 - Led the integration of the Natural Language Processing portion of the stack using Google's Dialogflow platform.
- Aug 2016 | May 2016 **NOVANI, LLC**
Network Engineering Intern
- Configured, imaged, and installed client hardware from vendors including HP, Lenovo, EMC, Brocade, Sonicwall, WatchGuard, Ruckus, and Meraki
 - Stood in for media production client's I.T. administrator on prolonged leave, providing technical support and server administration for Windows and Mac users in a corporate environment.

SELECTED PROJECTS

BERKELEY MAPS API

- Built a map application in Java for rendering, rasterizing, and routing (Using A* algorithm for optimization) within Berkeley.
- Implemented fully functional zoom and pan with QuadTree data structure
- Expanded application with auto-suggestions in location search using Trie data structure.

BROKER WEB APPLICATION

- Developed web app at the CalHacks 4.0 Hackathon that crawls multiple news sources and extracts positive and negative sentiment from stock-related articles to analyze the market with a custom point system and graph visualization.
- Built front-end with HTML/CSS, and Javascript (jQuery framework)

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

B.A. in Computer Science

Expected Graduation Date: May 2019

GPA: 3.36/4.0

Coursework

CS61A - Structure and Interpretation of Computer Programs
CS61B - Data Structures
CS61C - Machine Structures
CS70 - Discrete Mathematics and Probability
CS170 - Efficient Algorithms and Intractable Problems
CS162 - Operating Systems
CS161 - Computer Security
CS198 - Web Design DeCal
CS198 - iOS DeCal

SKILLS

LANGUAGES

Java	C	HTML/CSS
Python	RISC-V	JavaScript
Swift	Bash	LaTeX

TOOLS

Android Studio	Atom	Adobe CC
IntelliJ	Sublime Text	Figma
Xcode	Vim	Sketch

FRAMEWORKS

JUnit	jQuery	Hadoop
Firebase	Node.js	Spark

DIGITAL FRIDGE iOS APPLICATION

- Developed iOS application in Swift that enables users to keep track of expiring items in their refrigerator in a detailed, ordered list.
- Utilized Google's Firebase framework to sync data and images between user accounts and devices.

RISC-V COMPILER AND PROCESSOR

- Created a compiler in C that translates RISC-V assembly instructions to machine code.
- Implemented a fully-functional model of a 32-bit two-cycle processor and arithmetic logic unit in Logisim based on RISC-V that reads and executes the compiled assembly code.