

# ROBIN SINGH

SOFTWARE ENGINEER

## CONTACT

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## LANGUAGES

C++  
Java  
C (89/99)  
Golang  
HTML  
CSS  
SQL  
Python  
Javascript  
Bash/Shell

## SKILLS

Object Oriented (OOP)  
Networking  
REST APIs  
TCP/IP  
Linux/FreeBSD  
Android Studio  
Web Development  
Operating Systems  
MySQL  
Multi-Threading  
Web2Py  
Agile/Scrum  
Git

## REFERENCES

Available upon Request

## EDUCATION

2013 - 2014

### De Anza College

Bachelor of Science, major in Computer Science  
GPA 3.72 / 4.0

2014 - 2016

### University of California, Santa Cruz

Bachelor of Science, major in Computer Science  
Honors in the major

## EXPERIENCE

### Virtual Gateway Labs

May 2016 - Jul 2016

*Software Development Engineer*

Implemented API and CLI interface for Virtual Broadband Gateway product. Work included creation, implementation, and testing of API endpoints, as well as CLI commands. Seamlessly integrate the API, CLI, and back-end code in order to minimize code-redundancy. Test and improve existing back-end code in order to maximize performance and robustness.

### Datacare Corporation

Jan 2016 - Mar 2016

*Software Engineer Intern*

Responsible for creating an Android application to bypass the company website, as well as implement a localized cache in order to minimize network usage and improve speed and efficiency.

### Baskin School of Engineering, UCSC

Sep 2015 - Mar 2016

*Teaching Assistant - Computer Science Department*

Guide students in their approach to assignments, as well as expand on in-class lectures. Help forge assignments that complement in-class material as well as promote understanding of key object oriented concepts.

### OCZ Storage Solutions

Jun 2015 - Sep 2015

*Systems Test Engineering - Intern*

Collaborated with the automation team to write new scripts, as well as improve the efficiency and robustness of previous scripts. Worked with the Systems Test division to set up hosts, and run interoperability tests.

## PROJECTS

### CryptoFS

Build upon FreeBSD by adding another file system layer implementing symmetric-key Cryptography using AES and SHA-1. Encryption was achieved by adding new system calls, vnode encryption bits, and intercepting reads and writes to disk and redirecting them.

### Lottery Scheduler

Alter the Operating System's approach to assigning quantum to a process in a multi-threaded environment. Move towards a ticket based randomized approach, assigning tickets to each process, and scheduling in an irregular manner to eliminate starvation while optimizing for performance.

### Down

A social android application with event-based invitations, per-user databases stored as arrays of data, user-database support with live logins, and inter-user communication with unicast as well as multicast support.

### SlugClasses

A database style site with server-side code written in python and mysql. Features a database of professors, classes, and reviews. Built using various interconnected tables, to make sure all information is up to date.