

# Vybhav Achar Bhargav

vybhavb.com  
contact@vybhavb.com  
github.com/vybhavb  
linkedin.com/in/vybhavb

## experience

### RealTime, Novateur Inc Santa Cruz, CA

Android Developer | October 2017 - September 2018

- Created an application that allows students to find events and meet others through events and experiences.
- The application was written in **Kotlin**, bundled with **Java** for smaller components of the application
- Amazon Web Services** used to handle backend calls. **Firestore Database** used to store user data.
- Worked with **Firestore Authentication** along with the **Twilio** API for secure authentication and phone number verification of users.
- Used the **SendBird** API for the in-app messaging service, giving users the ability to discuss the events with others

### Team 2473, Cupertino High Robotics Cupertino, CA

Software Engineer/Software Mentor | June 2016 - September 2017

- Worked with a group of 40 students to create, design and build a robot during the FRC 2016-17 season
- Supported the development of the main control systems, using **Java**, to aid in debugging and testing of the robots through gameplay. Along with **PID Motor control** for the robot drive train
- Built a server-based simulation environment using **Python** to automate queuing of parts testing and Java along with the **Solidworks Simulator** to simulate new parts on a test rig and run automated script testing in the **FRC Simulator**.
- Built a custom set of network utilities to allow a Raspberry Pi to communicate with the robot.
- OpenCV and LIDAR systems** with Python used to teach the robot obstacle avoidance and targeting for better autonomous gameplay

## projects

### vybhavb

My personal website and blog. Built with **Bulma**, **Vue**, and **Nuxt.js** to use server side rendering.

### choreganizer

A centralized location for roommates to assign chores to each other. Used **Firestore** for the authentication and storage, **Next.js** for server side rendering and **Progressive Web App(PWA)** support which simulates the app to seem native on the major mobile platforms.

### whenu

A multi-platform application to access the menus of various dining halls and gives the user the option to find where and when a dish is served. Uses the open source **menu-scrape** api, **React** and **PWA** support

### menu-scrape

an open-source automated dining hall menu scraper to efficiently scrape, store and deliver data from various universities. Built using **Cheerio.js** to scrape the web pages, hosted on **Zeit's Now** platform, **Redis** to store data along with **Amazon Web Services** to automate daily menu retrieval

### seizelt

a research hiring platform to connect highly qualified students with professors and automatically alerts students/professors about potential candidates. Built with **Angular** and hosted on **Heroku**

### verifAi

a minimalistic attendance interface to make the process of taking attendance quicker and easier. Allows teachers to create classes and uses students geolocation to make sure they are in class. Built with **Java** to build an **Android** application and **Angular** to build a web platform.

## education

### University of California at

### Santa Cruz (Santa Cruz, CA)

B.S Computer Science

September 2017 - July 2020

- Courses:

Programming in **C** and **Java**  
Algorithms and Data Structures  
Comparative Languages  
Intro to Analog Circuits  
**Assembly**  
Computer Architecture,  
Distributed Systems  
Operating Systems  
System Design  
Discrete Mathematics  
Vector Calculus, Linear Algebra

## skills

### Javascript

Node.js, React, Cherrio.js, Vue.js, Flutter, React Native, Electron, light.js, Progressive Web Apps, Express

### Python

Flask, Tensorflow, OpenCV

### Java

Kotlin, Android App Development

### C/C++

Systems design, utilities

### Web

HTML, CSS, PHP, Ruby on Rails

### Database Systems

MySQL, PostgreSQL, Heroku

### Firestore

Firestore Auth, Realtime Database, Firestore, Cloud Functions, Hosting

### Git, CI/CD

Git, Travis ci, Circle ci, Netlify

### Linux/Unix/Posix

Arch Linux, Bash, ZSH

### Assembly

Risc-V, MIPS, intel x86

### Serverless

Now.sh, AWS Lambda

## interests

Natural Language Processing  
NeuroEvolution of  
Augmenting Topologies  
Security Analysis  
Capture The Flag  
Network Management  
Network Security  
Photography  
Distributed Systems  
Self Driving Cars