# PARAN SONTHALIA

Contact
Portfolio Website: http://paransonthalia.com/ • GitHub: https://github.com/psonthalia

## OBJECTIVE

- Seeking challenging Summer Software Engineering Internship to utilize my strong programming and critical thinking skills. A Computer Science 4.0 GPA and relevant experience back up my strong skills and passion for software engineering.

## EDUCATION

- Pursuing Bachelor's Degree in Computer Science and Data Science at **UC Berkeley Class of 2022**
- Courseware - Fall Semester: The Structure and Interpretation of Computer Programs (CS 61A) and Foundations of Data Science (Data 8)
- Spring Semester: Data Structures (CS 61B) and Designing Information Devices and Systems I (EE16A), Principles of Business at Haas School of Business (UGBA 10)
- **4.0 Major GPA**

## ACADEMIC ACTIVITIES

- Systems and Controls engineer in **UC Berkeley Hyperloop**: A highly selective group of students designing and building a hyperloop scale model to compete at **SpaceX** headquarters
- Hackathons: Building projects and competing in large scale hackathons
- Programming Instructor: Getting young kids excited about programming; conducting workshops at various conferences including Oracle Open World, JavaOne4Kids, Code4Kids, Silicon Valley Code Camp, Devoxx4Kids and CoderDojo

## PROGRAMMING SKILLS

- Languages: Python, Java, ReactJS, JavaScript, Salesforce force.com APEX, HTML, CSS, C#, Scheme, SQL
- App Development: XCode (Swift, Objective-C), Android Studio (Java), React Native, Unity
- Databases: Firebase, XML, JSON

## WORK EXPERIENCE

- **Research Apprentice, Data Science – UC Berkeley** **Jan 2019 – Present**
  - Working with data for renewable energy and transportation to explore different exploratory statistics using machine learning
  - Researching under Distinguished Professor of Energy, Daniel Kammen
    - Former Science Envoy for the Department of State of the United States
- **Course Staff, CS61A – UC Berkeley** **Jan 2019 – Present**
  - Holding office hours for CS61A - The Structure and Interpretation of Computer Programs
  - Assisting students during lab section to help with various questions and problems with the coursework
- **Founder – Mango Apps, Mountain View, CA** **Jun 2016 – Present**
  - Develop apps to solve social issues
  - Internship program for high schoolers: Built a team of high school interns and over the course of each summer we built a new project (iOS, Android, and web) from inception to completion
  - Currently working to complete existing projects and starting new ones

- **Software Engineering Intern – Selecterra, Sunnyvale, CA** **Jun 2018 – Aug 2018**
    - Helped integrate functionality to view current leads on a map of the territory using APEX, JavaScript, HTML/CSS, and Leaflet
    - Helped map territories and avoid conflicts
- **Software Engineering Intern – LeanData, Sunnyvale, CA** **Jun 2017 – Aug 2017**
    - Learned the Agile development methodology and participated in daily SCRUM calls
    - Designed and developed the capability to cap the number of leads to be run through the round robin, to only allow leads to be run during working hours, the ability to round robin a custom field, and fixing the existing production defects. Backend was built using APEX and frontend using JavaScript and HTML/CSS

PROJECTS

- **DeWaste**: Won **Fellowship** (UC's incubation program) at Cal Hacks and received $1000 in funding plus admittance into a 12-week mentorship program to take DeWaste further. Its built using Raspberry Pi, Camera, and a web app to take photos of the trash every couple minutes and analyze the photos to figure out what was being thrown away the most. Approved to run a pilot program with UC's cafeteria to reduce waste
- **TrashCam**: Won 5 Prizes at LA Hacks. It's a self-sorting trash can which takes a photo of the item and then sorts the trash into its respective bin. We used a Raspberry Pi connected to a camera and servos in a cardboard box. The web app and mobile app was build using ReactJS and React Native.
- **Scheme interpreter**: Scheme is a LISP language and I wrote an interpreter in Python to evaluate Scheme code using the methodology of a Read Eval Print Loop (REPL)
- College App Planner: Created a free web app for high school seniors to select colleges and plan your college apps, currently being used by MVHS and other users
- **RoBotany**: Won **1st Place** at Los Altos Hacks. This project is to improve results of home gardening. We designed our own sensors to monitor real-time moisture levels using a mobile app. This project was built using Raspberry Pi, phone camera, Google Vision, and the iOS app uses ARKit and location services
- **Droid Control**: Won **Top 3** at Menlo Hacks. The objective of this project was to help kids learn to program without having to buy a third-party tool. The iOS app uses ARKit to display a maze with your player in Augmented Reality (AR) and in the web app, you could design a custom level
- **Auxilium Health**: Awarded **1st Place** in the Mountain View App Competition. It reminds a patient to take the medicine on time. Patient could take a photo of the medication label to analyze the text using Google Cloud Vision, so you know exactly when to take a medication
- **Mountain View Art**: Selected among the **top ten** in Mountain View App Challenge and recognized by **Mayor** of City of Mountain View. The app showcases citywide artwork using the Google Maps API and an XML database

VOLUNTEER ACTIVITIES

- **Eagle Scout, Boys Scouts of America**: Now mentoring young scouts; leading Programming merit badge and Cyberchip
- Xcelerate Reviews: Reviewing supercars on my YouTube channel; invited by San Francisco and Silicon Valley auto shows in addition to supercar dealerships to review the latest models since 2017
- **Founder and Director of Mountain View Hacks**: Annual hackathon for high school students