

# DIYA SAHA

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## Education

**University of California, Santa Cruz**

**Sep. 2019 – Jun. 2023**

*Bachelor of Science in Computer Engineering with specialization in Robotics; Minor in CS*

*3.74/400*

## Relevant Coursework

- Data Structures
- Logic Design
- Computer Architecture
- Feedback Control Systems
- Assembly Language
- Embedded Systems
- Probability & Statistics

## Experience

**Tech4Goods Labs**

**April 2021 – September 2022**

*Undergraduate Research Assistant*

*Santa Cruz, CA*

- Analyzed the different methods of youth career mentorship through an organization, Your Future Our Business(YFIOB) by building low and high fidelity models using Figma.
- Worked efficiently in a team setting to create a grant study proposal to be presented to the Institutional Review Boards(IRB) to receive approval to conduct the aforementioned research.

**DSights.Inc**

**Summer 2022**

*Software Research Intern*

*Remote*

- Gathered competitive intelligence from chain restaurants located in Bangalore through their menus that were available to public use.
- Explored different ideas for a prototype to help our client build and refine menus of different chain restaurants and created a study proposal to help the client understand our findings.
- Using Natural Language Processing Techniques conducted analysis on the menus accessible to us and explored different methods to visualize data using Python libraries like Matplotlib, Pandas and Seaborn and Google Excel.

**Mentor Collective**

**August 2021 – Present**

*Trained Mentor*

*Santa Cruz, CA*

- Helped over 50 incoming students to organize their academic life and help them navigate through different student services provided by UCSC.
- Conducted meetings through Zoom as well as over phone calls to assist these students and answer any queries they have.

## Projects

**Object Oriented Interactive Game, Frog Frenzy | Verilog, Vivado, FPGA board**

**November 2022**

- Coded an Object Oriented Playable game called Frog Frenzy (very similar to Flappy Bird) with the help of modules in Verilog.
- Connected the code to work with an FPGA board and displayed it on a VGA monitor with the help of pixels.
- Frog-Frenzy GitHub repository

**Word Processing | C, C++, HTML, CSS**

**September 2021**

- Demonstrated a clear understanding of how word processing is done with the help of basic data structures, like Queues, Heaps, Dictionaries in C and transformed the results into a visually appealing HTML web page.
- Created a HTML web page with words that had different colors and fonts, where the size depended on how often the word was repeated and the color was determined using the priority of the word based on a given list.
- Program 3 GitHub repository

**Breadcrumbs | Swift, Alexa, Amazon Developer Tools, XCode, MapKit, Cocoapods**

**August 2021**

- Created a Android app to help locate hiking trails based on the users location.
- Implemented Speech Detection to help make the user accessibility easier while hiking and submitted it to the Superpositron hackthon.
- BreadCrumbs GitHub repository, BreadCrumbs DevPost

## Technical Skills

**Proficient Programming Languages:** Python, Java, C/C++, HTML/CSS, JavaScript, SQL, Assembly

**Experienced in Developer Tools:** VS Code, Eclipse, Google Cloud Platform, Amazon Developed Tools, Vivado, Figma

**Technologies/Frameworks:** Linux, GitHub, WordPress

## Honors / Certificates

- Received Dean's Honor on a couple of quarters and maintained good academic standing every quarter
- Participated and completed a Data Analytics Professional Certification and a UI/UX Design certification from Google
- Acquired a Machine Learning Specification from Andrew Ng through Coursera