

## **Ajay Vincent Miranda**

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**Education:** University of California Davis, CA, expected June 2020

**B.S. Computer Engineering, GPA 3.3**

### **Relevant Skills:**

- Programming Languages: C, C++, Arduino, Ti Tiva, HTML, CSS, Python
- Embedded Hardware: Qualcomm DragonBoard, Arduino, Ti Tiva microcontroller, Raspberry Pi
- Open ERP and CRM - Odoo
- Orcad, Circuit Maker software
- Data Structures and Algorithms
- Experience with the Linux/Unix OS filesystem

### **Experience:**

#### **SacHacks Hackathon**

**11/18**

- Won the “Best IOT hack” award for the project “SeatMe” in a team of four. (<https://twitter.com/MLHacks/status/1064269672831430656>)
- “SeatMe” - a web application which can be utilized in various public places to reserve seats in advance, coupled with the Arduino, Qualcomm DragonBoard computer and sensors.
- Intended to help provide for social good in multiple situations and places, like how the implementation of such a system in an area with a large seating capacity would help determine successful evacuation in the event of an emergency.
- Primarily worked on integrating the Qualcomm DragonBoard computer with the pressure switch sensor through a script written in Python. Configured to function as a linux server from which the client website can send requests for the sensor information to determine the seat availability in real time.

#### **EE- Emerge**

**9/28 - Present**

- Focus on developing a 3 - quarter spanning electronics project with a selected team
- Designed the schematic and printed circuit board for a time fountain in circuit maker, with appropriate conventions for the circuit components.

#### **Human-Computer Interaction Design**

**4/18 - 6/18**

- ECS189H - Completed a rigorous upper-division computer design course focused on human-computer interaction design.
- Learned core components of interaction design - Brainstorming design ideas and models, prototyping user interfaces.

- Developed mock up personas for products, applied heuristics for UI design, and qualitative and quantitative evaluation of feedback.
- Incorporated these design principles into developing a productivity-based application “ Scheduled! ” in a group for the final project.

### **Hack Davis Hackathon**

1/18

- Worked with a team of 4 students to build an education-focused web application named “ezA+”.
- Contributed to the web page scraping functionality of the application.
- Utilized python with modules like beautiful soup to program the web scraping capabilities.

### **Activities/Interests:**

#### **Embedded Systems**

- Built a robot using the arduino uno microcontroller board using a combination of electronics and sensors like a capacitance sensor and motors.
- Extrapolated data from the environment and responded as specified by a program written in the low-level Arduino programming language.
- Tinkering with hardware and software
- Free Writing
- Graphite drawing - (DeviantArt profile link - <https://vincentiaro.deviantart.com/> )