# MICHAEL HUANG

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#### TECHNICAL SKILLS

• Tools and Languages: Python, Java, C++, HTML, CSS, Assembly, Bash, Git, Unix, Linux.

#### **EDUCATION**

#### San Diego, United States

University of California, San Diego

**Expected June 2024** 

- B.S. in Computer Science.
- Relevant Coursework: Java & OOP; Data Structures & OOD; Discrete Mathematics; Mathematics for Algorithms and Systems; Systems Programming; Operating Systems; Computer Architecture & Logic.

#### EXTRACURRICULAR AND VOLUNTEER EXPERIENCE

## **Onboard Computer Developer**

#### **Triton Unmanned Aerial Systems**

September 2023 – Current

- Rewrote navigation software from **Python** to C++ to improve performance.
- Overhauled coordinate and distance conversion algorithms to improve accuracy and precision of navigation.
- Rewrote and implemented more comprehensive **errors** and **unit tests** for navigation algorithms.
- Organized workshops for **Git** and **Unix** to help onboarding team members.

## AP Computer Science T.A.

## **Citrus Valley High School**

**August 2017 – June 2019** 

- Taught students software engineering practices and the fundamentals of Java and OO programming.
- Created quadcopter programming curriculum in C++ to teach students principles of low level design.
- Created basic **HTML** and **CSS** tutorials to organize a class and student websites.

## **Robotics Technician Lead**

#### **Citrus Valley High School**

**August 2015 – June 2017** 

- Worked in teams to design and build robots and compete in the 2016 and 2017 VEX Robotics competition.
- Guided team members with the designing and building process of the robots.
- Directly responsible for inventory management and hardware upkeep for several classes of engineers.

## **EMPLOYMENT**

## **Customer Service Associate**

## **Lowe's Home Improvement**

January 2021 - May 2021

- Worked with professional clients to identify and resolve credit and technical product issues.
- Helped management with housekeeping duties during busy periods to improve department productivity.

## **PROJECTS**

# San Diego Zoo Route Planner

UCSD CSE 100, Spring 2022

- Https://github.com/HuangMichael94/ZooSeeker/
- Worked within a **scrum** team to develop solutions to improve zoo visitor navigation.
- Developed an Android app that interacts with the Google Maps API to plan routes between zoo exhibits.
- Extensive focus on testing with **JUnit** and **RoboElectric**.
- Used story point estimation using the Fibonacci and scrum poker methods.
- Regular standups, sprints, retrospectives, and task estimation.
- Implemented user stories are defined by San Diego Zoo staff to fulfill acceptance criteria.

#### **BestCities4CS Research Project**

UCSD COGS 108, Spring 2020

- Https://github.com/HuangMichael94/BestCities4CS-Research-Project/
- Analyzed the best place to live by salary for UCSD computer science undergrads completing their studies.
- Implemented methods of data cleaning, sorting, and summarization with Pandas.
- Conducted web scraping of Glassdoor job postings using **Selenium**.