Jason Vega

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Education

University of California, San Diego

June 2022 (expected)

B.S., Cognitive Science (Machine Learning and Neural Computation), GPA: 4.0

Coursework: Basic Data Structures and Object-Oriented Design, Software Tools and Techniques Laboratory, Introduction to Computer Science and Object-Oriented Programming: Java, Structure and Interpretation of Computer Programs (UC Berkeley), Introduction to Programming (Diablo Valley College)

Projects

OneByte App (SD Hacks)

October 2018

https://github.com/jason-vega/OneByte

- Created a mobile app in a team of three people that allows users to efficiently find and advertise free and low-cost local food through a feed of crowd-sourced data.
- Utilized Firebase in a React Native framework to implement backend features of sending and retrieving real-time data.
- Used CSS and JSX to contribute to the design of the app's login, feed and "Add Event" screens.

F.R.C. 2018 Robot

January 2018-March 2018

github.com/FalconX-Robotics/frc2018

- Contributed to the development of Java code for a F.I.R.S.T. Robotics Competition robot in a team of four.
- Utilized the WPI Robotics (Java) Library to program the drivetrain to autonomously move a desired distance and turn at a desired angle using feedback from encoders and a gyroscope.

Scheme Interpreter (Structure and Interpretation of Computer Programs)

August 2017

- Used Python to develop an interpreter for a subset of the Scheme language.
- Implemented features including support for tail calls, dynamic scoping and macros.

Experience

President, Project Manager, Programming Mentor

May 2017-May 2018

FalconX Robotics, Pleasant Hill, CA

- Managed a team of 35 high school students who designed, fabricated and programmed a 120 lb. industrial-sized robot to participate in the F.I.R.S.T. Robotics Competition within a six-week time frame.
- Developed and taught a series of lessons to introduce programming basics and OOP using C++ and Java to new students, complete with slideshows, assigned readings, demo code and exam.
- Promoted student outreach and diversity resulting in a growth of 133% in active student membership from first year; 66% of members were new underclassmen, and 40% of members were female.

Academic Intern January 2018-May 2018

UC Berkeley Electrical Engineering & Computer Science Department, Berkeley, CA

- Engaged with students in an introductory computer science course of over 1000 students during lab (approximately 30 students) and office hours to help with homework, lab assignments, and exam prep.
- Explored different approaches to teaching programming concepts in Python, Scheme and SQL, and learned how to empower students to actively engage with the problems they were trying to solve.

Skills & Achievements

Programming: Python, Java, C++, SQL, HTML/CSS | Foreign Languages: Chinese

Achievements: Second place - Women in Computing FA18 Beginner's Programming Competition at UCSD