Zachary Plante

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Education

University of California, Santa Cruz • 2015-2019 • B.S. Computer Science • Baskin School of Engineering • GPA: 3.2

Coursework

Natural Language Processing SQL and Databases Computational Models Software Design Project I Software Design Project II Discrete Mathematics Computer Architecture Operating Systems Analysis of Algorithms Comparative Programming Software Engineering

Skills

Languages

Python • Java • C • JavaScript • HTML • CSS • Processing • SQL • Latex • Arduino • C# • C++

Frameworks

Django • React • React Native

Tools

XCode • Android Studios • NLTK • Firebase • Git • Google Cloud Platform • Micro-Controllers •

Operating Systems

Linux • Mac • Windows • FreeBSD

References

Emily Slatter

Manager 831-713-9147

MRep@WoodstocksCruz.com

Juliana Zatz-Watkinz

Supervisor 530-219-1390 jzatzwat@ucsc.edu

Professor Dena Robertson

Mentor 831-459-609 demrober@ucsc.edu

Projects

Meme Feed | Social Media App

Winter 2019 - Present

- Full Stack Developer on React Native powered App for iOS and Android
- Allows Users to upload photos and GIFS, as well as comment, message and follow each other
- Oversaw back-end using Firebase and Firebase Storage
- Currently launched on iOS App Store and Google Play Store

Natural Language Processing Final Project | Question Answering Machine

Winter 2019

- Utilized NLTK to develop a QA Machine
- Able to answer both factoid and discourse guestions
- Utilization of dependency and constituency parse trees
- Developed a discourse model to resolve pronouns and ambiguity

DataViz | Web Application

Fall 2018

- Built a Web Application utilizing Diango
- Generates graphs and songs to correlate with users input data or CSV files
- Used D3 and Tone.js to play the graph back to the user

Hands Free Mouse | Eye Tracker

Summer 2019 - Present

- Prototyped a hands free mouse using an EEG chip and eye tracking software
- WebCam tracks eye movement to mimic cursor movement, while the EEG chip checks for brainwave spikes to enable clicks

Modified FreeBSD | Open Source OS Work

Fall 2018

- Made several edits to the FreeBSD source code and rebuilt the kernel
- Modifications included the scheduler, the pageout algorithm, and the file system

Terminal • AWS • REST APIs • JSON Mario Bot | Custom Nintendo Controller

Spring 2019

- Programmed a Teensy Micro-Controller to output serial information through USB to communicate and control a Nintendo Switch
- The Micro-Controller can receive serial input from a Python script to play different games or create custom controllers

Related Work Experience

Modified Supplemental Instruction Tutor | Learning Support Services at UCSC

Winter 2018 - Spring 2018

- Tutored students for an introductory computer science classes
- Created collaborative programming exercises to teach students
- Attended weekly training meetings to learn communication and teaching skills