Alan Constantino

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Education Bachelor of Science in Computer Science

California State University, Northridge

2016 - 2022

Programming Java Python JavaScript/HTML/CSS

Skills Adaptable Determined Problem-solver Quick learner Team Player Results Oriented

Projects FarmSignal (Senior Design Project)

github.com/AlanConstantino/FarmSignal

- Spearheaded a team of six people to develop an open-source solution for an automatic plant watering and monitoring system that we dubbed "FarmSignal" which involved a Raspberry Pi with various sensors, a full-stack web application, and a Python command line application.
- Led the front-end team and expedited the creation of several components and pages by designing mockups in Photoshop and utilizing React alongside Material-UI for rapid component development.
- Developed a Python command line application and algorithm to interface with and control
 various sensors which collect and send sensor data to the back-end through GET and POST
 requests. This command line application was used to effectively calibrate the external water
 sensor connected to the Raspberry Pi leading to more accurate data gathering and controls
 when the plant should be watered.
- Aided the back-end team by implementing JWT authentication by writing a middleware in Express.JS effectively decreasing back-end development time which led to them finishing a major feature of the project two weeks ahead of our scheduled sprint deadline.
- Meticulously wrote documentation on hardware wiring and assembly to help team members assemble the project remotely. This same documentation was also later used for the final public release of the FarmSignal project which was hosted through ReadTheDocs.
- Utilized agile methodologies like SCRUM and Kanban boards as well as technologies like Git and JIRA to track features or issues and plan weekly sprints and meetings in which we brainstormed new ideas, gave/received constructive feedback, and resolved any issues whether technical or interpersonal.

Raspberry Pi Automatic Plant Watering System

github.com/AlanConstantino/rpi-plant-project

- Created an automatic plant watering system using a Raspberry Pi and Python. Every 24 hours, the Raspberry Pi waters a plant and sends you an email notification once watering has finished.
- Utilized the "gpiozero" library to interface with the Raspberry Pi alongside the "schedule" API to schedule email notifications at given time intervals to notify the user.
- Published an article on the social media platform "Dev.to" with step by step documentation on how to assemble and create this project with more than 22,000 views.

Java Inventory System

github.com/AlanConstantino/inventory-system

- Developed a command line inventory system for a "make believe" movie rental storefront by utilizing Java. The system keeps track of the current number of movies in stock, orders movies if below a certain threshold, prints order labels for movies that need restocking, and also keeps track of buy and return orders.
- Leveraged doubly linked lists for quick insertion and deletion of movies.
- Reads and writes to "txt" files to keep track of waitlisted customers and the movies in stock.

Event CSUN AI-Jam 2019

California State University, Northridge

- Worked in a team of five people to create an Al model that recognizes ASL hand signs.
- Developed a few Python scripts for image collection and manipulation which effectively sped up the process of sifting through and selecting image data to feed the neural network.
- Utilized libraries such as Numpy and OpenCV 3 for image manipulation.

Language Able to read and write Spanish proficiently and understand it at a native level.