Andres Rodriguez Michel

Details

Location

Phone

Email

GitHub
Dosx001
Personal Website (WIP)
Dosx001.github.io

Education

California Polytechnic
State University
San Luis Obispo, CA
Bachelor of Art, Physics

Languages

Python, TypeScript, C++, HTML,
JavaScript, VimScript, CSS, SCSS,
Bash, LabVIEW, MATLAB

Operating Systems

Linux: Arch, Ubuntu
Windows: 10, 8, 7

Frameworks

PyUnit, Selenium, Bootstrap,
Django, Electron

Libraries

React, Matplotlib, NumPy, jQuery,
Coverage.py, Google Test, CV2,
MSS, Tesseract, FuzzyWuzzy,
PyAutoGUI, Mousetrap

Other

Git, Vim, VS Code, Markdown, npm,
CMake, Makefile, winget, Arduino,
Photoshop, Microsoft Office, AJAX

This resume was created using
HTML & CSS

Personal Projects

GI-Artifact-Leveler: Documentation & Source Code   **Fall 2021**
- Designed an algorithm that optimizes gear updating in the game Genshin Impact
- Produced Python script to automate mouse actions in in-game menu
- Employed tools to capture and read onscreen images in real time
- Utilized libraries such as Tesseract, MSS, CV2, FuzzyWuzzy, PyAutoGUI

AnimeCalendar: Documentation & Source Code   **Winter 2020 - Present**
- Created customizable calendar allowing users to pick from 76 Fall 2021 anime
- Provided a quick access to each anime stream like Hulu, YouTube, Crunchyroll, etc.
- Programmed a event handler to record and display user watch history
- Built a responsive website with native JavaScript, HTML, CSS, TypeScript, SCSS
- Deployed Selenium framework to web scrape airing titles, times, and streams

GitPrompt: Documentation & Source Code   **Fall 2020 - Summer 2021**
- Developed open source CLI tool that color codes files at various git stages
- Coded a multithreaded C++ program with object oriented programming and pipes
- Adjusted user Linux prompt displaying latest commit log, total stashes, branch, etc.

AliasMe: Documentation & Source Code   **Winter 2020**
- Improved open source Bash script to run user generated dynamic Linux aliases
- Cooperated remotely with the Taiwan-based creator

Work Experience

BEACON: Student Assistant   **Summer 2017 - Fall 2019**
- Designed an array of radio antennas to detect high energy cosmic neutrinos
- Independently worked on simulating, prototyping, and constructing antennas
- Analyzed hundreds of simulations using Python, Matplotlib, and NumPy
- Communicated with a diverse multidisciplinary team from three universities

Relevant Coursework

Data Structures & Fundamentals of Computer Science   **Spring 2020**
- Implemented various data structures using object oriented programming
- Performed unit testing for code using the PyUnit framework and Coverage.py
- Aided dozens of peers by debugging projects and answering questions

Advanced Instrumentation in Experimental Physics   **Spring 2020**
- Constructed basic collision-avoiding robot using Arduino motors and sonar
- Programmed an Arduino to measure temperature change using humidity sensors
- Automate categorizing filter type from input signals using LabVIEW

Quantum Physics Laboratory I & II   **Fall 2018 & Winter 2019**
- Integrated Python in weekly technical reports for data visualization and analysis
- Delivered technical presentations using lab findings related to quantum events
- Handled various equipment like oscilloscopes, signal generators, multimeters, etc.

Physics on the Computer   **Spring 2018**
- Solved complex physics problems by coding simulations and data manipulation
- Utilized numerical methods like Monte-Carlo, interpolation, optimization, etc.

Leadership Experience

Cal Poly Chess Club: Event Coordinator   **Fall 2017 - Spring 2018**
- Collaborated with cabinet to plan and organize public events

Ballet Folklórico de Cal Poly: Public Relations   **Fall 2016 - Spring 2017**
- Maintained the public image and online presence of the club