Andres Rodriguez Michel

Details

Address

Phone

Email

GitHub

<u>Dosx</u>001

Education

California Polytechnic State University, San Luis Obispo, CA **BS** Physics

Languages

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

Frameworks

PyUnit, Selenium, Bootstrap, Django, Electron

Libraries

Matplotlib, NumPy, jQuery, Coverage.py, Google Test, Mousetrap

Package Managers

APT, pip, npm, Chocolatey

IDE / Text Editors

Vim, Visual Studio Code, Visual Studio, Android Studio, PyCharm

Operating Systems

Windows, Linux, Ubuntu

Other

Git, Markdown, CMake, Makefile, Microsoft Office, Photoshop, AJAX, Arduino

Personal Projects

My Resume -- Source Code

Summer 2021

• This resume was created using HTML and CSS

AnimeCalendar.github.io: website -- Source Code

- Winter 2021 Present
- Built an interactive website using JavaScript, HTML, CSS, TypeScript, SCSS • Users can create their own calendar by picking from all 58 Summer 2021 anime
- Offers quick and easy access to each anime streams like Hulu, YouTube, etc.
- Records and displays user's watch history
- Offers multitude of hotkeys, allowing users to navigate the site without a mouse
- Coded a Python script with Selenium to web scrape and creates a JSON file containing currently airing anime titles, air times, cover art, and stream links

AliasMe: Bash script -- Source Code

Winter 2021

- Executes user generated static and dynamic Linux commands
- Collaborated with Taiwan based partner

Git Tools: Linux <u>Bash</u> Prompt -- <u>Source Code</u>

Fall 2020 - Summer 2021

- Programmed 4 <u>Bash</u> functions to display Git info on the Linux Terminal
- Color codes and displays every unstaged file inside a Git directory • 17 different color codes: red = delete, yellow = edit, green = staged, etc.
- Displays the latest Git commit, number of Git stashes, and current Git branch

Mini-RPG: game -- Source Code

Summer 2020

- Linux terminal game, written in $\underline{C++}$, where a player tries to escape a maze while fighting randomly spawning enemies in turn-based combat
- Tested code using Google Test
- Created <u>Bash scripts</u> to automate tests, generate coverage report, and run exe files

Work Experience

BEACON: Student Assistant

Summer 2018 - Fall 2020

- Worked with a diverse multidisciplinary team from three universities to design an antenna to detect neutrinos
- Took ownership of various projects like simulating antennas, analyzing data, etc.
- Analyzed large volumes of data for hundreds of simulations using Python, Matplotlib, and NumPy
- Communicated with team through phone/video calls, Slack, and weekly meetings

Relevant Coursework

Data Structures || Fundamentals of Computer Science

Spring 2020

- Programmed projects using Object Oriented Programming
- Debugged and tested code using PyUnit and Coverage.py
- Assisted more than dozens of peers with their assignments and debugging code Fall 2018 || Winter 2019

Quantum Physics Laboratory I || II

- Used Python in weekly technical reports for data visualization and data analysis
- Gave two technical presentations explaining experimental lab results

Physics on the Computer

Spring 2018

- Solved complex physics problems by coding simulations and data manipulation
- Utilize numerical methods like Monte-Carlo, interpolation, parameter optimization

Leadership Experience

Cal Poly Chess Club: Event Coordinator

Fall 2017 - Spring 2018

• Collaborate with cabinet to plan and organize public events

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