# **Andres Rodriguez Michel**

#### **Details**

Address

**Phone** 

**Email** 

**GitHub** 

Dosx001

#### Education

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

## Languages

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

#### Frameworks

Bootstrap, Django, Electron, PyUnit, Selenium

## Libraries

Coverage.py, Google Test, Matplotlib, Mousetrap, NumPy, *iQuery* 

# Package Managers

APT, Chocolatey, npm, pip

## **IDE / Text Editors**

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

## **Operating Systems**

Linux, Ubuntu, Windows

#### Other

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

## **Personal Projects**

My Resume GitHub repo

**Summer 2021** 

Winter 2021-Present

• This resume was programmed using HTML and CSS

AnimeCalendar.github.io: website GitHub repo

- 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 using Selenium to scrape info from online and create a JSON file containing all currently airing anime titles, air times, cover arts, and stream links, allowing the website to automate tasks

AliasMe: Bash script GitHub repo

Winter 2021

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

Mini-RPG: game GitHub repo

**Summer 2020** 

- Linux terminal game, written in C++, where a player tries to escape a maze while fighting randomly spawning enemies in turn-based combat
- Tested coded using Google Test
- Created Bash scripts 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, building antenna mast, and analyzing data
- Analyzed large volumes of data for hundreds of simulations using Python, Matplotlib, and NumPy
- Communicated with team through phone/video calls, presentations, posters, 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 peers with their assignments and debugging code

Quantum Physics Laboratory I || II

Fall 2018 || Winter 2019

- Designed data collection methods and analyzed data to report parameter estimations and uncertainties
- Used Python in weekly technical reports for data visualization and data analysis
- Gave two technical oral presentations to peers explaining quantum phenomena using personal 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

**Fall 2016-Spring 2017** 

• Maintain the public image and online presence of club