# Justin Miranda

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#### **SUMMARY:**

Computer Science Senior. Very strong background in object-oriented programming. Strong background in full stack development. Background in tutoring programming and math at the collegiate level. Talented in creating my own projects to gain industry experience. Highly skilled at communication and problem solving.

#### SKILLS:

Programming Languages: C, C#, C++, Java 8, Python 3, JavaScript, HTML 5, SCSS, CSS, Pug

Database: MongoDB, Adminer, PostgreSQL, MySQL

**IDEs:** Visual Studio Code, Unity, Visual Studio Community, Eclipse, Android Studio **Frameworks:** Node JS, Express, Mongoose, Flask, SQL Alchemy ORM, Bootstrap

Webserver: AWS, Heroku, Azure

Operating Systems: Windows, iOS, Ubuntu, Kali Linux, CentOS, Android

Project Management Software: Github, Perforce

#### **EXPERIENCE:**

### **PELT Software Engineer**

### Florida Space Institute/NASA

08/2020 - 05/2021

- Environment: Unity, Visual Studio Code, C#, Python, Flask, Heroku
- https://pelt.herokuapp.com
- PELT stands for Plume Ejecta Lunar Tools which is a particle simulator for moon landing missions to observe the safest areas for landing.
- This is a senior design project for my graduating semester, I oversaw the lunar tools amongst a team of six.
- Created the graphical user interface with the buttons and menu system as well as the cross-platform communication between the website version and the application.
- Programmed more than 10 scripts in C# in Unity to create the GUI and used visual studio code for editing code.
- Responsible for the output file locations and data format.
- Responsible for particle spawn locations and launch angles.
- Created the download feature for the particle positions.
- Executed every need from the sponsors on the menu system from the launch angles to naming the files based on launch angles.
- Calculated the number of particles expected to fly from landing site. This is known as the "particle size distribution".
- Worked on the backend of the website and launched it on Heroku.
- Responsible for version control of the simulation on the website.

## **Programming Tutor**

02/2017 - Present

## Valencia College

- Sole general programming tutor on Winter Park campus assisting any Valencia student on Zoom in best programming practices.
- Tutoring in Python, C, C++, Java, JavaScript, Bash
- Tutoring online via Zoom which used to be face-to-face.
- Assist 1 to 7 students at a time understand arrays, basic algorithms and functions, memory, and pointers.

• Assist 1 to 10 students at a time in Developmental Math, Pre- Algebra, Intermediate Algebra, College Algebra, Calculus I, II, III, Differential Equations, Discrete Math, Statistics and College Math for Non-STEM Majors

# Full Stack Developer

06/2020 - 07/2020

# Self-Employed

- Environment: Python, Flask, BootStrap, PostgreSQL, Adminer, Heroku, HTML, and CSS.
- Created and designed a book rating platform that takes APIs from goodreads.com for the values of the ratings and reviews then presents them for users to assess.
- Users can register, login, logout, search books within the database, review books, and rate books.
- Implemented a python program that uploaded 5000 comma-separated books to the Heroku database.

### Game Developer

05/2020 - 06/2020

### Self-Employed

- Environment: Unity, VS Code, C#, Audacity
- Project involving a 2-D platformer rocket game that allows users to control its flight.
- Programmed the controls and level success/failure events.
- Created prefab objects for faster level creation.
- Wrote and recorded the music.

#### **EDUCATION**

University of Central Florida – Orlando, FL

01/2018 - 05/2021

Bachelor of Science Degree in Computer Science GPA 3.05 Overall; GPA 3.25 at University

Minor in Secure Computing And Networks (SCAN) GPA 3.84 Overall

#### **Relevant Courses**

Processes of Object-Oriented Software, Cyber Security, Cryptography, Network Security and Privacy, Secure
Operating Systems Admin, Comp Sci I & II, System Software, Discrete I & II, Java & C Programming, and Senior
Design I & II.

Valencia College – Orlando, FL

08/2017

Associate of Arts Degree in Computer Science