# **Arturo Portelles**

# **EDUCATION**

# Florida International University

2018 - December 2021

# Bachelor of Arts, Computer Science

- 3.72 GPA
- Dean's List
- Bright Futures Scholarship (Florida Academic Scholar)
- Courses taken: Programming 1, Programming 2, Programming 3, Data Structures, Discrete Structures, Intro to Databases.

# **EXPERIENCE**

# NASA (Ames Research Center)

# Software engineering intern

August 2020 - Present

Mountain View, California (Remote)

- Working along with scientists helping to create a data visualization webpage that supports model renders
  for the habitable planet zone, mass radius diagrams, and additional visualizations that leverage data from
  the NASA exoplanet archive.
- Built out site features and frontend logic with React and a Flask backend to serve Bokeh object models and computational models that query data from the exoplanet archive.

#### Queentessence

## Software Engineering Intern

March 2020 - June 2020

Aventura, Florida

- Developed and collaborated on key user features using the Django web framework, Python, Docker, JavaScript, ¡Query, HTML, CSS, Bootstrap, and GitLab for version control.
- Implemented under my team a fully functioning analytics dashboard in which I designed and integrated the user interface as well as pulled and processed data from the back-end for display allowing clients to better understand aspects of their business.
- Worked with internal and external API's on tasks such as serializing key user data for the dashboard and integrating a live chat module on the existing code base.
- Worked in conjunction with the UI/UX designer to implement features on the platform webpage and helped develop the backend for the blog and newsletter signup.
- Learned practical development practices following a Scrum methodology using Jira.

## **PROJECTS**

# "CovidSync" - Overall 2nd / Won best use of Google Cloud

Web Application – React / Express / JavaScript / Node.js / Google Firestore / API's / GitHub

- Attended PantherHacks sponsored by Google Cloud.
- Built an application serving as a general-purpose hub for all things COVID-19 that allows users to see statistics, nearest testing locations, a newsfeed, and a gig posting page setup with account creation and language translation.

# Graphing Calculator

Desktop Application - Lua / Löve / GitHub

A collaborative project built from scratch with the purpose of graphing any user inserted function.
 The application is able to graph multiple functions at once along with displaying its integral using Riemann sums.

# Maze Generator and Pathfinding Visualizer

Desktop Application - Python / Pygame / GitHub

- The application generates random mazes of variable size using a Backtracking algorithm. After generating the maze it animates the 'flood filled' path and the solution path using Breadth First Search on the open nodes of the maze grid.
- The user is able to alter the number of elements and speed of the animation.

## **SKILLS**

Python	Git/0	GitHub	Lua	HTML	CSS	JavaScript	React
REST API's/API's		Express	Java	Node.js	MongoDB		