

Projects:

SQL Data Exploration:

Details: Use different Functions and statements showcasing my understanding of SQL using Covid data. Also created a Visualization using said Data in Tableau.

Link to Project on Github: <https://github.com/TimothyP791/PortfolioProjects>

Cubesat: (1 year)

Details: Worked on a group project with a multidisciplinary team where we were supposed to design a frame to hold a Raspberry pi with attached sensors that was to be sent up into space and be able to detect areas at risk for wildfires. Worked on image recognition to change a grayscale image into an RGB image in order to determine High risk areas. Also worked on getting the sensor data outputting to the ground station console.

Link to Code on Github: https://github.com/TimothyP791/NDVI_Calc

Indie Game Development: (6 months)

Details: Helped to design a 2D game in which the player would move and shoot enemies and try to avoid hazards. The player would rack up points by killing enemies. I designed the Hazards and hit detection using C# in unity game engine. (Scrum team development)

Educational Game Design: (6 months)

Details: Helped to design a forces wire game in which the player had access to a leap motion sensor to grab two wires changing the angle and force vectors. They would then be able to push a button to show the resultant vector and the game would showcase the resultant vector with angle and force calculations. This required calculating the resultant vector based on the current position of the other two as well as fixing several bugs with the button press and leap motion issues.

Parts Quote Project:

Details: Created a project in which the user inputs Customer name, address, and phone number and then chooses which car parts the customer wishes to order. The finish quote input will return a quote with the name, address, and phone# as well as the total cost of all items ordered by said customer.

Link to code on github: <https://github.com/TimothyP791/PartsQuote>

Flight Booking Project:

Detail: Created a project where a list of flights is read from a file and inserted into a linked list. The user can then choose to view, book and cancel flights within the list. They can also print a flight ticket with the input name and address information.

Link to code on github: <https://github.com/TimothyP791/FlightBooking-Project>

C++ Projects from School:

<https://github.com/TimothyP791/Project1>

<https://github.com/TimothyP791/Project2>

<https://github.com/TimothyP791/Project3>

<https://github.com/TimothyP791/Project4>

<https://github.com/TimothyP791/Project5>

Links to Codes in different languages:

C++ Data Structures/Example Problems:

Link to Code on Github: <https://github.com/TimothyP791/data-Structures-C>

HTML-CSS-Javascript Code:

Link to code on Github: <https://github.com/TimothyP791/HTML-CSS-JavaScript>

Matlab Filters and Assignments:

Link to code on Github: <https://github.com/TimothyP791/MatlabCode>