

WINSTON N. TAN

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TECHNICAL SKILLS

Programming Languages: Java, C, C++, Python, HTML/CSS, JavaScript, MATLAB, Assembly, Ruby, Ocaml
Libraries/Frameworks: Flask, Pandas/NumPy, Node JS, Express, Jupyter, MongoDB, Junit, Apache
Tools/Operating Systems: Git/GitHub, Windows, macOS, Linux, RESTful APIs, Arduino, Blender, Postman, Anaconda, Google Colab

EXPERIENCE

Acclaim Technical Services (ATS) - SWE/Extended Reality (XR/VR) Intern – Summer 2022

- Used Flask (Python library) and RESTful API to help test and develop the backend of a government prototype. Used Git and HTML to update frontend of prototype.
- Tested pre-released software such as Virtualitics (Advance AI Analytics Tool) to filter out data from large datasets (over 180,000 points) to create a pleasing representation and analysis for the customer
- Deployed Blender to create a variety of 3D models to ingest into virtual reality worlds
- Employed RESTful API methods to ingest data such as coordinates onto a Cesium GIS mapping system
- Tools used: REST APIs, Postman, PyCharm, Flask, Python, Blender, HTML, Git/Git Bash, Virtualitics, Spatial, GIS, and Oculus Rift

PROJECTS

Autonomous OTV Rover, C++, Arduino, Circuit Lab, WIFI Vision System

- Developed an autonomous rover capable of navigating through a course via ultrasonic sensors and a WIFI vision system
- Optimized power output to motors for enhanced course/task completion and navigation
- Lead a team of 7 to build a rover capable of extinguishing and reporting flames using snuffers, flame sensors, WIFI module, and servo motor; budgeted project using Microsoft Excel

Impact of Per Game Stats on NBA Team Success, Python, HTML, NumPy/Pandas, BeautifulSoup

- Gathered and parsed over 9000 data points regarding the top 50 teams from an NBA database. Focused on the top teams between 2010-2020
- Utilized NumPy, Pandas to bring a thorough analysis of a team's success based on their season's statistics

Terp Store, HTML/CSS, Apache, XAMPP, Php

- Created a webpage mimicking Terrapin Webstore using HTML and CSS
- Configured Apache and XAMPP to serve the webpage on a local server for testing and developing purposes
- Incorporated several HTML features such as forms, fields, links, and other tags to enable website navigation across multiple pages

Personal Portfolio Website, HTML, CSS, JavaScript

- Designed a personal portfolio displaying my skills, projects, and personal life via HTML, CSS, and JavaScript

Shell Project, C, Makefiles

- Developed the guts of a shell that supports Boolean operations, pipes, and file redirection
- Demonstrated proficiency in C programming by utilizing advanced features such as pointers, input/output redirection, makefiles, threads, and processes

EDUCATION

University of Maryland, College Park

May 2024

Department of Computer Science, Computer Science Major

Robert H. Smith School of Business, General Business Minor

RELEVANT COURSEWORK

CS and Engineering: Data Science; Data Structures; Web Application Development; Object-Oriented Programming; Discrete Structures/Mathematics; Computer Systems; Organization of Programming Languages; Algorithms; Calculus I/II; Differential Equations, Applied Probability and Statistics; Physics I/II; Intro to Electrical & Computer Engineering; Digital Logic Design; Engineering Design

Business: Principles of Management, Financial Management, Entrepreneurial Opportunity Analysis; Discovering New Ventures; Accounting, Financial Management