Objective

My goal is to pursue a career that will enable me to expand my knowledge and experience in programming. Additionally, I would like to work with individuals who share my alacrity for programming and empower me to further my understanding of the field and how to create solutions for my employer.

Website

https://damian-cantu.github.io/DamianCantuPortfolio.github.io/index.html

Education

University of Texas Rio Grande Valley, Edinburg, TX **Spring 2021 - Fall 2023**

- Bachelor Degree in computer science
- 3.75 GPA

South Texas College, McAllen, TX **Fall 2019 – Fall 2020**

- Associate Degree in computer science
- 3.52 GPA

Work Experience

Techincal Support Specialist II - IS Department **Dec 2023 - Present**
DHR Health Hospital, Edinburg, TX

- Create and maintain auto-login scripts for various clinic dashboards using AutoIT.
- Routinely adress and resolve complex technical issues, enhancing system efficiency and user experience.
- Provide comprehensive support to users, including troubleshooting, guidance, and training on various IT systems and software.
- Worked closely with the IT team to manage large-scale projects, contributing to successful outcomes through effective teamwork and communication.

Internship Experience

The Data Mine at Purdue University, West Lafayette, IN

Trained to use R, SQL, and Python in The Data Mine Seminar to learn about how these languages are applied in a data scientists work setting. Work included using these languages to analyze data frames and extract and interpret the data using mathematical and algorithmic solutions. This training is applied to the research done with The Data Mine's corporate partners.

Corporate Partners:

- **BASF** **August 2023 – December 2023**
    - Teamed with BASF on a research project to analyze agricultural data and predict market models for the company.

- Gained an understanding about market models and how to analyze agricultural data and how it applies to the market.
- Researched about time series analysis and how to use the data to predict changes in the market model.

- **Sandia National Labs** **August 2022 – April 2023**
  - Collaborated with Sandia National Labs on a research project about flight track stitching.
  - Studied how to extract, analyze, and clean flight data.
  - Learned about the Tracktable library for Python and how to apply the library's functions in order to create new features, algorithms, and machines for predicting and stitching broken flight paths.

Projects

Senior Design Project, **January 2023 – May 2023**
Rogue RPG

Collaborated in a two-person group project for our senior design class at The University of Texas Rio Grande Valley. My partner Mark Kvapil, and I created a retro style RPG that is procedurally generated. We created the game using C# in the Unity 2D Game Development Framework. We learned the basics of character movement, enemy design, combat systems, as well as map designs. As a team we conducted research on procedural generation and used a third-party library to help us accomplish the randomly generated terrains. I also researched pathfinding algorithms to achieve smooth and smart movement amongst non playable game characters.

Technical Skills

- Detail-oriented with strong problem-solving abilities.
- Proficient with Microsoft 365 applications such as Microsoft Word, Excel, etc.
- Experienced with Linux Kernal including the Linux Console for file management and navigation.
- Solid understanding and experience with the AGILE methodology of development and group software development projects.
- Extensive knowledge in programming and programming fundamentals/theory.
- Competent in multiple programming languages, libraries, and coding frameworks:
  - C for System Administration and Embedded Software.
  - C++ using STL for computation, algorithmic analysis and object oriented programming.
  - C# using the Unity 2D Development Framework for games.
  - Java for backend web development.
  - Java Script for front end web development.
  - Python for data visualization using Pandas, Matplotlib, and Numpy libraries.
  - R and SQL for data frame analysis.
  - Dart using the Flutter framework for development of cross-platform mobile applications.
  - Ruby using the Ruby on Rails framework for web development and regression testing.