Adrian Salinas

Edinburg, Texas 78541 ▪ (956) 277-4535 ▪ asalinas3205@gmail.com ▪ github.com/A-Sal3

EDUCATION

The University of Texas Rio Grande Valley – *Edinburg, TX* Fall 2021 – Fall 2024
Bachelor of Science in Computer Science **GPA: 3.96**

Relevant Coursework: Computer Networks, Web Development, Data Mining, Algorithms & Data Structures, Software Engineering I, OOP in C#, Organization of Programming Languages, Database Design

SCHOOL PROJECTS

Gradebook Program – *CSCI 3340* Fall 2024
About: Group project developed a program that lets users see and modify students' grades.

- Using **Ruby on Rails**, we created a program that allows for CRUD operations on a database of students' information. Access to these actions was completely restricted if not signed in and partially restricted based on the user's account. I also created a page that showed the statistics of a class.
- Used **Jira**, **GitHub**, and **Agile/Scrum** methods to plan, organize, and coordinate our work.

Predict Coffee Bean – *CSCI 4343* Fall 2024
About: Created an MLP that predicts a coffee's bean type based on a sample dataset.

- Using **Python**, I visualized the given dataset, created the MLP, and visualized the MLP's output to better understand it and its results. Throughout the project, I experimented with different techniques to create a more effective MLP.
- Analyzed the given data to find a feature that will create a new, more effective dataset. This new dataset dealt with outliers/errors from old data and was used to construct the MLP.

Course Scheduler Website – *CSCI 3342* Fall 2024
About: Created a website that shows available courses and the courses' professors.

- Using **JavaScript/React**, I created a dynamic website that interacts with an **SQL** database in order to show and edit the database's courses and the professors that teach each course.
- Created multiple small web pages to showcase different features of web development throughout class.

SKILLS

Programming Languages: Python *(Advanced)* ▪▪ C++ *(Advanced)* ▪▪ SQL *(Intermediate)* ▪▪ Ruby *(Intermediate)* ▪▪ Java Script *(Intermediate)* ▪▪ HTML *(Beginner)* ▪▪ C# *(Beginner)* ▪▪ Java *(Beginner)*
Frameworks: LaTeX ▪▪ Ruby on Rails ▪▪ React ▪▪ Microsoft Office Suite
Development Tools: Git/GitHub ▪▪ Jira ▪▪ Agile/Scrum Methodology

EXPERIENCE

UTRGV – Research Assistant (ASARG), *15 hours per week* May 2023 – December 2024

- Communicated and coordinated with a team; Designed algorithms; Technical/theoretical writing.
- Public Speaking; Discussed research work during presentations and poster sessions.
- Supported Others; Assisted students who were new to research.
  - *Computing Threshold Circuits with Void Reactions in Step Chemical Reaction Networks (MCU 2024)*
    - *Best Student Paper Award*
  - *Computing Threshold Formulas with Bimolecular Void Reactions in Step Chemical Reaction Networks (UCNC 2024)*
  - *Building Discrete Self-Similar Fractals in Seeded Tile Automata (CCCG 2024)*

Project: Conway's Game of Life Generating Music December 2024 – Present
About: Conway's Game of Life simulator that plays music based on the board's configuration.

- Motivated by curiosity; Integrated programming with other fields; Independently experimented with ideas.
- Implemented various features, customization, and GUI designs using **Python**.
- Researched documentation for **tkinter** and **pygame** libraries to fix errors and maintain the ability to have real-time interactions.

24-Hour Research Hackathons Ranked 4th (November 2023)
Work under pressure/time constraints; Work closely with a small team; Assisted event coordinator.

- Designed deterministic Chemical Reaction Network system that can behave randomly.
- Bounded the number of tiles needed to make any rectangular 1/0 pattern in Pattern Assembly Tile Systems.
- Helped organize event and proposed a research question based on Ramsey Theory. (November 2024)