

Education

Texas A&M University, GPA 3.5, Major GPA 3.8

Aug 2022 – May 2026

- CS Courses: Program Design, DSA, Computer Organization, Database Systems, Programming Languages, Computer Graphics, Intro to Software Engineering, Computer Systems, Design and Analysis of Algorithms

Activities and Achievements

- Aggie Coding Club Best Project Manager for Spring 2024
- Mu Eta Sigma Math Honor Society
- Website Manager for The DJs of AggieLand
- Aggie Data Science Society

Experience

Programming Instructor

May 2024 – Present

Smart Core Labs

Pearland, TX

- Taught data structures and algorithms in C++, Java, and Python to students by explaining and visualizing code.
- Developed, revised, and used Python curriculum to be used by future SCL Instructors.

Research Assistant

Nov 2023 – Dec 2023

Texas A&M Live Lab

College Station, TX

- Performed research and analysis on the benefits of gamification on education.
- Analyzed output logs from a calculus game using Python libraries Numpy and Pandas.

Programming Instructor

June 2023 – August 2023

iCode

Houston, TX

- Taught game design, web development, and game modding through Lua, JavaScript, HTML/CSS, and Python.
- Taught students game development concepts and software with the Unreal Engine and Unity game engines.

Projects

Life3D

- Developed a 3-dimensional cellular automaton designed to simulate the long-term processes of biological evolution.
- Implemented object-oriented code using the Rust, leveraging multithreading, graphics libraries, and various kinds of smart pointers in compliance with Rust's borrow-checking model.
- Implemented linear algebra transformations for rotating organisms.

PWGen

- Published a cross-platform browser extension for deterministically, reproducibly, and securely generating strong passwords for websites.
- Utilized JavaScript, regular expressions, and browser APIs, and published to the Chrome Web Store.

RetailDB

- Created a CRUD database application for managing the employees, inventory, orders, and timesheets for a hypothetical retail company.
- Designed, denormalized, and implemented using Python with Flask, PostGresql, and SQLAlchemy, JavaScript with React.
- Deployed the database to AWS.

Technical Skills

Programming Languages: C++, Rust, Python, Java, JavaScript/TypeScript, C#, Golang, SQL

Tools & Technologies: Git/Github, Linux, Databases, Web Development, Game Development, Functional Programming, Object Oriented Programming, Backend, Networking Protocols, AWS