

Tristan Pedro

tristanpedro02@gmail.com | 936-524-2894

[LinkedIn](#) | [GitHub](#) | [Website](#)

EDUCATION

Bachelor of Science in Computer Science

May 2024

Texas State University, San Marcos, Texas

Minor in Mathematics | Texas State GPA: 3.77 | Cumulative GPA: 3.74

Honors & Awards: Dean's List 3/3 Semesters and Computer Science Research Excellence Reward

Relevant Coursework: Data Structures & Algorithms, Assembly Language, Discrete Math 1 & 2, and Calculus 1 & 2

TECHNICAL SKILLS

Languages: Experienced in Python, C++, C#. Familiar with JavaScript, TypeScript, HTML/CSS, and Java.

Frameworks & Technologies: Git, Dash, Angular, .NET, REST, GraphQL, and Linux

Extracurricular Activities: .EXE (Computer Science Club) & GDSC (Google Developers Club)

RELATED PROFESSIONAL EXPERIENCE

Texas State Computer Science Department - IMICS Research Lab

Undergraduate Research Assistant

May 2022 - Present

- Engaged in the REU Summer Research in Edge Computing, emphasizing semi-supervised labeling of sensor-generated time-series data; utilized Python, Pandas, Numpy, Dash, and Tensorflow
- Continuously developed and enhanced a deep-learning-based application for biomedical data visualization, labeling, and modeling throughout the research duration
- Co-authored and contributed to a research paper on signal processing and machine learning, presented at the SPACE Workshop during ICASSP 2023 in Rhodes, Greece

Dell Technologies

May 2023 - August 2023

Software Engineering Intern

- Initiated GraphQL integration over an existing REST API and directly implemented it within a critical microservice for Dell's globally recognized enterprise-level sales platform, enhancing data efficiency and response times; utilized C#, .NET Framework, Angular, Javascript, and Typescript
- The project served as a practical proof of concept, laying the groundwork for broader application within Dell and offering insights to current engineers
- Delivered technical presentations to team members, managers, and Dell executives and reached the finals in the intern hackathon

SOFTWARE PROJECTS

Texas State University - Department of Computer Science - Raspberry Pi Cluster

Software Project Team Member

January – May 2022

- Worked with a team that planned to expand the Texas State Server Network with a Raspberry Pi Cluster, that allows students to benchmark programs from their coursework.
- Oriented the cluster to utilize Kubernetes, LDAP and JupyterHub to load balance programs running on the cluster and display diagnostics.
- Attended weekly meetings concerning updates about the project, I would then guide project team members by relaying information from the meetings.

Sudoku Solver in Python

Personal Project

August 2022

- Developed a functional Sudoku game that utilized the backtracking algorithm to solve the board.
- Implemented a GUI using Pygame, allowing the user to manually solve the Sudoku board.
- The user can press the spacebar to automatically see a step by step solving of the entire board.