Tristan Pedro

tristanpedro02@gmail.com | 936-524-2894
LinkedIn | GitHub | Website

SUMMARY OF QUALIFICATIONS

- I'm a reliable, focused undergraduate seeking a challenging internship for the summer of 2023, to allow myself to grow as a learner, problem solver, and communicator.
- Successful team experiences in machine & deep learning, data science and software development.

EDUCATION

Bachelor of Science in Computer Science May 2024
Texas State University, San Marcos, Texas
Minor in Mathematics | Texas State GPA: 4.0 | Cumulative GPA: 3.80
Relevant Coursework: Data Structures & Algorithms, Assembly Language, Discrete Math 1 & 2, Calculus 1 & 2, and Technical Interview Prep

TECHNICAL SKILLS

Languages: Proficient in C++ and Python, Familiar with Java, GoLang and HTML
Software: Git, JupyterLab/Notebook, QtDesigner, Google Colab, VsCode, Spyder and Anaconda
Extracurricular Activities: .EXE (Computer Science Club) & GDSC (Google Developers Club)

RELATED PROFESSIONAL EXPERIENCE

REU Summer Research Experience in Edge Computing
Semi-supervised Labeling of Sensor-Generated Time-Series Data Research May - August 2022

- **Technologies**: Python, Pandas, Plotly, Ipywidgets, Anaconda, UMAP, Numpy, and Tensorflow.
- Developed an application prototype for visualizing, labeling, reviewing, and creating models of biomedical data using deep learning.
- Developed application interface using Jupyter Notebooks that can be deployed as standalone websites through Voila.

Undergraduate Research Assistant - IMICS Lab August 2022 - Present

- Hired back to continue project work on the application prototype from the summer REU.
- Expanding the visualization suite and the functionality of visualizations (e.g UMAP).
- Expanding the model library to include a more diverse selection of choices (e.g Transformers)
- Responsible for implementing new features and fine tuning existing ones, to ultimately deploy the application for biomedical researchers to use.
- Currently implementing Dash callback functionality to allow interactive graphing and a more user friendly interface.

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.