# 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, communicator, and problem solver.
- Successful team experience 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 and Technical Interview Prep

## TECHNICAL SUMMARY

**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

*Machine & Deep Learning* | **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**
Semi-supervised Labeling of Sensor-Generated Time-Series Data Research August 2022 - Present

- Continuing project work on the application prototype from 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 LSTM, Transformers, RNN).
- Implementing new features and fine tuning existing ones, to ultimately deploy the application for biomedical researchers.

## SOFTWARE PROJECTS

**Texas State University - Department of Computer Science - Raspberry Pi Cluster**
Software Project Team Member January – May 2022

- On a team with plans 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.

**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 you to manually solve the Sudoku board.
- You can press the spacebar to automatically see a step by step solving of the entire board.