(702) 493-7054

Allan Paiz

allanpaiz.com
allan.paiz0@gmail.com
github.com/allanpaiz

Skills

- **Languages**: C++, Python, Java, Bash
- **Libraries**: Pandas, NumPy, JUnit, Plotly, Matplotlib, Scikit-learn
- **Tools**: LaTeX, Neovim, Git, GitHub, Excel, PowerPoint, Adobe Photoshop, Premiere Pro

Education

B.S., Computer Science, Minor in Mathematics, University of South Carolina, 3.78 GPA **AUG 2023 – Present**

- **Academic Honors:** Fall 2023, Spring 2024, Spring 2025

Relevant Course Work:

- **Software Engineering**: Java, documentation, OOP, design patterns, unit testing, GitHub
- **Advanced Programming Techniques**: C++, memory management, pointers, iterators, Linux environments
- **Data Structures & Algorithms**: Algorithm design and analysis, problem solving, data structures
- **Statistics**: Probability, distributions, analysis of variance, regression, hypothesis testing
- **Discrete Mathematics**: Logic, proof techniques, recursion, combinatorics, graph theory
- **Computer Architecture**: Instruction sets, memory addressing, MIPS assembly

Projects

- **Defensive Stopping Power:** 2024 NFL Big Data Bowl — Kaggle Competition [Project Link] [Finalists Link]
  - **Focus:** Python, machine learning, data analysis, visualizations, feature engineering, self-directed
  - **Description:** Developed a feedforward neural network in Python to detect contact between ball-carriers and defenders using NFL player tracking data. Engineered a novel metric, Yards Allowed After Contact, to evaluate defensive performance for player scouting and game analysis.
- **TuneUp by JETA:** Software Engineering Course — Team Project [GitHub Link] [Demo Video]
  - **Focus:** Java, version control, collaboration, documentation
  - **Description:** Worked as a team to develop a music application written in Java. I worked in an agile, iterative development process implementing design patterns, object oriented programming, and unit testing. I created documentation, system design diagrams, and used GitHub for version control.

Employment

Advanced Data Collector - Pro Football Focus **MAY 2024 – Present**

- I collect NFL and NCAA football player data focusing on speed, precision, and consistency. I have processed 12 full and 3 partial games identifying and recording over 116,930 data points.
- In the 2024 season I achieved a 99.5% player identification accuracy, 96.7% player position accuracy, and a 98.9% accuracy across all other categories, validated through PFF's double-entry verification process.

US Marine - United States Marine Corps **MAY 2018 – OCT 2022**

- I used computer-based geographic information systems (GIS) to create and analyze maps and spatial data for mission planning and reconnaissance reporting.
- I served as a Sapper Leaders Course Instructor, mentoring and teaching Marine leaders through lecture and hands on training in mission planning, problem solving, and small unit leadership.
- I worked effectively in a variety of teams and challenging environments, including overseas deployments and advanced technical training.

Technical Designer - Production Resource Group **JUN 2015 – DEC 2016**

- I collaborated with clients and project managers to engineer solutions for entertainment scenery and machinery projects, meeting strict safety, functional, budget, and timeline constraints.
- I used AutoCAD for 2D and 3D modeling, drafted technical drawings for manufacturing, and created assembly instructions with a bills of materials following company standards.

Awards

2024 **NFL Big Data Bowl - Runner Up** My submission was selected as one of the top 10 finalists, earning a runner up prize of $5,000. [Kaggle Announcement] [NFL Announcement]

2021 **Marine Corps Good Conduct Medal** Outstanding performance and conduct during three years of continuous active enlisted service in the U.S. Marine Corps.

2021 **Certificate of Commendation** Outstanding performance of duty while serving as a seminar leader, Lance Corporal Leadership and Ethics Seminar Class 3-21.