Marshall Williams

marshall.junior03@gmail.com | 512-595-9231 | LinkedIn | https://github.com/MarshallWilliams1

EDUCATION

Bachelor of Computer Science | 3.91 GPA, Honor's College, Dean's List

- Texas State University, San Marcos | Data Structures, Algorithms, Software Engineering, Computer Architecture
- Texas State Achievement Scholarship (70% tuition), worked for tuition throughout school.

WORK EXPERIENCE

Software Engineer Intern - Accio Data

Dec 2022 - Aug 2023

- Developed product features and wrote automated nightly test cases using Java and Selenium to ensure quality.
- Implemented and verified bug fixes on staging servers, improving software reliability and reducing release defects.
- Collaborated across development departments for solutions to reduce the number of Jira review bounce-backs.
- Created development documentation using LaTeX to help clients understand new changes.

Service Team Lead - H-E-B

Sept 2023 – Present

- Lead Service Team, including scheduling, shift management, and task assignments for 20 or more employees at a time.
- Trained over 25 new and existing team members for multiple roles within a 3 month hiring season.
- Reduced 'customer wait over 3 minutes' below 10% by analyzing cart sizes and optimizing checkout lanes.
- Collaborated with team leaders and members to achieve 98% items per minute metric across department.

PROJECTS

NYC Taxi Data Analytics & Prediction Platform | AWS Cloud, IaC, Docker, Data Engineering, ETL

- Architected a containerized serverless AWS pipeline with S3, Athena, and Fargate to process millions of taxi records.
- Built machine learning model with SageMaker and Scikit-learn to predict trip durations.
- Created dashboards in Jupyter Notebook for rider demand, fare distribution, and tipping behavior.
- Automated cloud infrastructure with Terraform and deployed via GitHub Actions CI/CD pipeline.

Riot Games Match Data Analytics Platform | Python, JavaScript, SQL, REST API, Data Engineering

- Engineered a Python ETL pipeline processing Riot API data into a MySQL database for performance analysis.
- Created a Flask REST API to serve game stats from a SQL database, enabling real-time data visualization.
- Built a responsive SPA with React and Tailwind CSS for interactive data exploration and visualization.
- Presented insights by calculating win percentages for game characters and players.

Overthrow: Real-Time Multiplayer Strategy Game | WebSockets, Full-Stack Development

- Engineered a scalable Node.js/Express.js backend with Socket.IO, enabling smooth real-time multiplayer matches.
- Architected server-side logic to coordinate player actions, challenges, and game flow with low-latency updates.
- Optimized performance by integrating Redis, ensuring consistent state management across distributed servers.
- Designed and implemented a responsive JavaScript/CSS UI and deployed to cloud hosting for mobile and desktop.

SKILLS

Software Development: C++, Java, JavaScript, Python, HTML/CSS, Node.js, React, Flask, Rest APIs, Git, Agile, Jira, Selenium, Unit Testing, Linux

Data & Cloud: MySQL, Pandas, Microsoft Excel, AWS Cloud Operations, Machine Learning, Docker, Terraform, CI/CD