Joel022703@gmail.com
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David Martinez

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Education

Georgia Institute of Technology | Atlanta, GA August 2022 - Spring 2025

Bachelor of Science in Computer Science, GPA 3.13

Kaiser Aluminum Scholarship, Robles Family Scholarship, Andrew Family Scholarship

Greenville Technical College | Greenville, SC August 2021 – May 2022

Dean's List, Latino Student Association Board Member, GPA 4.0

Skills

Programming Languages – Java, Python, C/C++, Swift, Bash, HTML, CSS, JavaScript, R, VHDL, ARM Assembly

Technologies and Tools – React, Firebase, PyTorch, Git/GitHub, Docker, MongoDB, Web3, DApps, Quartus

Certifications – 2024 Web Development Bootcamp, iOS Development Bootcamp

Core Concepts – Data Structures, Algorithms, Software Design Patterns, Web Development, Machine Learning, Computer Networks, Human-Computer Interactions, Mobile Applications, Embedded Systems Development, Computer Vision

Work Experience

ALDI | Simpsonville, SC June 2022 – May 2023

Store Associate

- Trained and onboarded 20+ new employees, providing comprehensive guidance on day and night shift operations to ensure seamless transitions and team efficiency, as well as breaking store efficiency records by 90%

University Projects & Organizations

Event Driven Visualization Tool | SLB - Capstone Project January 2024 – December 2024

Visualization Tool for Embedded Systems Codebases

- Led a multidisciplinary team to design and develop a tool that parses and visualizes large, complex legacy C and C++ codebases used in SLB's embedded systems, improving developer onboarding and productivity.
- Directed the extraction of Intermediate Symbolic Representations (ISRs), similar to interrupts, and assignments from extensive code repositories, transforming complex code structures into intuitive, actionable visualizations.
- Built with React/React Native, Node.js, and Firebase, ensuring real-time data synchronization and scalable backend processing for handling massive embedded systems codebases efficiently.

Heart Disease Predictor | Georgia Tech August 2024 – December 2024

Machine Learning Project

- Developed and optimized machine learning models to predict heart disease using SVM, Random Forest, and Multilayer Perceptron, focusing on maximizing predictive accuracy and recall.
- Conducted thorough data preprocessing, feature engineering, and hyperparameter tuning to improve model performance and ensure robust generalization.
- Achieved 0.92 accuracy and recall with both Random Forest and SVM models, showcasing strong proficiency in model selection, evaluation, and optimization for real-world applications.

Emoji-Aware Sentiment Analysis | Georgia Tech March 2025 – May 2025

Natural Language Project

- Developed a dual-stream sentiment classifier using BERT for text and Emoji2Vec embeddings for emojis, fused via cross-modal attention.
- Preprocessed and balanced the Sentiment140 dataset with emoticon-to-emoji mapping; trained and evaluated the model in PyTorch.
- Improved class-level recall over a strong text-only baseline, demonstrating the benefits of integrating emoji semantics into sentiment analysis.