Carlos Felipe

754-265-8449 | cjfelipebazan@gmail.com | github.com/carlosf02 | felipecarlos.net

Education

University of Florida Gainesville, FL
Bachelor of Science in Computer Science - College of Engineering *Expected May 2026*

Relevant Coursework
Data Structures, Software Engineering, Database Systems, Data Science, Intro to ML, Operating Systems, Natural Language Processing

Experience

Data Analyst Intern May 2024 – Aug 2024
BFG International Corp *Miami, FL*

- Analyzed shipment and logistics data to optimize container (maritime) and air freight operations, improving route efficiency by 10%.
- Automated data entry and report generation using Python, reducing manual processing time by 30%.
- Utilized tools like Excel and SQL to analyze and visualize freight data, providing actionable insights to management.

Projects

Bulldozer Price Regression | *Python, Pandas, scikit-learn, Matplotlib*

- Built a ML pipeline to predict auction prices of used bulldozers using 401K+ records from the Blue Book dataset.
- Performed EDA, feature engineering, and data cleaning to create a model-ready dataset.
- Trained and evaluated Linear, KNN, Decision Tree, and Random Forest models, achieving $R^2 = 0.91$ with Random Forest.
- Applied GridSearchCV for hyperparameter tuning and compared performance using R^2, MAE, and MSE metrics.

EventSync | *Django, PostgreSQL, Tailwind, C++, HTML/CSS* | *GitHub*

- Designed and developed a full-stack web application for event hosting and management, allowing 200 users to create, browse, and purchase event access.
- Collaborated with a cross-functional team in an Agile environment, increasing team efficiency.
- Built a secure authentication system, a scalable database for 1000 events and users, and a real-time chat service.
- Integrated Stripe for secure payment processing, ensuring a seamless transaction experience.

Customer Segmentation in Retail | *Python, Pandas, Seaborn, scikit-learn*

- Predicted purchase likelihood using customer behavior data from the Online Retail dataset.
- Engineered recency, transaction count, revenue, and time-based features to improve model performance.
- Evaluated Logistic Regression and Random Forest, achieving 50% accuracy on a balanced dataset.
- Delivered insights on targeted discounts and promotion timing.

Fast-Track | *JavaScript, HTML/CSS* | *GitHub*

- Developed a route optimization web app for shortest-path queries across U.S. cities.
- Implemented Dijkstra's algorithm and a custom MinHeap class from scratch to efficiently calculate paths within a weighted graph.
- Integrated with a dynamic frontend visualization that displays and compares the results of Dijkstra and A* search algorithms.

Technical Skills

Programming Languages: C++, Python, JavaScript, SQL, HTML/CSS
Frameworks & Tools: Django, React, PostgreSQL, Git/GitHub, VS Code, JetBrains IDEs
Languages: Spanish (native), English (fluent)