

ARTHUR BARBOSA

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EDUCATION

University of Colorado Boulder

Bachelor of Science in Computer Science, Business Minor

GPA: 3.65/4.0

Boulder, CO

Aug. 2021 – May 2025

EXPERIENCE

Xero

Graduate Software Engineer

May 2025 – Present

- Frontend Engineer using React to streamline payment collections

Boeing

Capstone Project Manager

September 2024 – April 2025

- Leading a 7-person Agile team to develop AI-driven aviation solutions by fine-tuning 8 Small Language Models using a dataset of 376K NOTAMs, achieving accuracies exceeding 99.6% enhancing Boeing's flight operations.
- Deploying SLMs on edge devices to automate Q-code assignments for complex NOTAMs, reducing manual processing time by 20 hours per week.
- Overseeing cross-functional communication as the primary liaison to Boeing Digital executives, coordinating weekly progress reviews and presentations to align development milestones with organizational goals.

Easy Clean App

Software Engineering Intern

May 2024 – August 2024

- Improved app stability by identifying and resolving over 180 bugs, reducing crash rates by 70%
- Created 15+ new app screens focused on user experience and built automated tests using Appium along with backend scripts in Xano to streamline QA cycles.
- Expanded market reach by translating the app into Spanish and Portuguese, creating over 700 unique element IDs to ensure accurate translations.

Toro Investmentos

Mobile Developer Intern

June 2023 – July 2023

- Optimized user onboarding through A/B testing, increasing conversion rates by 15% among 4,000 daily sign-ups.
- Developed the first publicly available Flutter library to enable dynamic app icon changes on both Android and iOS, enhancing customization for premium users.
- Collaborated in an Agile team using CI/CD pipelines to accelerate feature delivery.

PROJECTS

Premier League Sentiment Analysis | Python, DistilBERT, PyTorch, Data Analysis

- Implemented a sentiment analysis pipeline for 7,640 tweets using TF-IDF vectorization and a Naive Bayes classifier, achieving an F1 score of 0.92 and uncovering trends in fan sentiment across Premier League teams.
- Fine-tuned a DistilBERT model to analyze informal text and soccer-specific slang. Performed Data Analysis, modeling, and graphing for each Team's result.

Astro Adventures | JavaScript, REST APIs

- Developed a space-themed website with real-time APIs for NASA's Picture of the Day, solar flare data, and live ISS location shown on Google Maps.

Arcane Game | Java, Gradle, Spring Boot

- Created a Dungeons and Dragons game leveraging object-oriented programming for scalability.
- Achieved 100% class coverage and 80% method coverage via test-driven development.

TECHNICAL SKILLS

Languages: Python, C, C++, Java, JavaScript, HTML, CSS, SQL

Tools/Frameworks: Git, Cloudflare, Pandas, CI/CD Pipelines, Flutter, React, Next.js, Docker, Tailwind, Xano, PyTorch

Concepts/Coursework: Data Structures, Algorithms, Computer Systems, Object-Oriented Programming, Database Systems, Web Development, Artificial Intelligence, Human-Computer Interaction