





# Alfredo Flores

 [LinkedIn](#) | San Diego, CA, 91911 |  619-433-5127 |  a3floresjr@gmail.com |  [GitHub](#)

## EDUCATION

---

**San Diego State University** | San Diego, CA

*Bachelor of Science, Major in Computer Science, Minor in Mathematics*

**Relevant Coursework:** Advanced Programming Languages, Algorithms, Computer Architecture, Computer Organization, Computer Security, Data Structures, Database Theory Implementation, Discrete Mathematics, Intermediate Computer Programming, Intro to Artificial Intelligence, Intro to Computer Programming, Intro to Software Systems, Linear Algebra, Machine Learning, Operating Systems, Principles and Techniques of Data Science, 3D Game Programming

## SKILLS

---

**Programming Languages:** JavaScript (React), Python, C++, C#, R, SQL, HTML/CSS

**Tools & Frameworks:** Git, Azure, Redis, VS Code, CLion, Google Colab, Flutter, XCode, Kali Linux, Unity, Microsoft Office

**Software Development:** RESTful APIs, DevOps, Agile Methodologies, Object-Oriented Programming, Test-Driven Development

**Soft Skills:** Adaptability, Attention to Detail, Communication, Critical Thinking, Problem-Solving, Troubleshooting, Team Collaboration

## PROFESSIONAL EXPERIENCE

---

**Treobytes** | San Diego, CA

*STEM Instructor*

**May 2025 - Aug 2025**

- Led hands-on classes in Python programming and introductory AI for groups of 15+ students
- Co-developed curriculum content for the Python and AI course, contributing instructional materials, exercises, and project guidelines to support structured learning outcomes
- Collaborated with team members to plan and execute engaging technical lessons that promote problem-solving and computational thinking
- Organized and prepared materials, ensuring smooth class operations and resource efficiency

**Daedalus Labs** | Wilmington, DE

**July 2024 - Jan 2025**

*Software Engineering Intern*

- Developed and deployed a secure HD wallet Chrome extension using JavaScript, React, HTML/CSS, and the Bitcoin Protocol
- Collaborated with cross-functional teams to design and implement secure user authentication and key management systems for crypto wallets
- Engineered a pagination system for high-volume data tables, reducing component render latency by 80%
- Integrated Redis Cache and Azure Functions to streamline data workflows, routing API-gathered data into NoSQL database tables for efficient storage, retrieval, and visualization across real-time blockchain applications
- Enhanced rune data visualization system by integrating APIs for real-time mint tracking, token symbolization, and market analytics, leading to a 25% increase in daily active users
- Developed automated data validation system to ensure accuracy of minted-out runes, pending transactions, and mint progress tracking across multiple blockchain networks

**Aztec Electric Racing** | San Diego, CA

**Aug 2023 - Aug 2024**

*Software Developer*

- Implemented technical processes by using engineering concepts and Python to help in the manufacturing/design of a formula-style electric vehicle for an annual EV competition
- Collaborated with cross-functional teams to monitor and analyze data pulled from ongoing vehicle tests with the goal of optimizing vehicle performance by at least 10-15%

## PROJECTS

---

**HD Wallet Chrome Extension** (React.js, JavaScript, HTML/CSS, Bitcoin Protocol)

- Developed and deployed a secure, hierarchical deterministic (HD) wallet as a Chrome extension for managing Bitcoin transactions
- Implemented core cryptographic functions including key derivation, address generation, and transaction signing using bitcoinjs-lib
- Designed and built a user-friendly interface with React for wallet creation, balance checking, and sending/receiving Bitcoin
- Integrated with Bitcoin testnet for safe development and testing of wallet functionalities
- Utilized Chrome Extension APIs for secure storage of encrypted wallet data and management of background processes
- Implemented message signing and verification features to enhance wallet security and user authentication

**SwipeApply** (Dart, Flutter, Firebase, Google Cloud API)

- Led the design and development of an Android app at the 2-Day Open Source Hackfest hosted by Major League Hacking
- Collaborated with a team to create an app allowing users to swipe through customized job listings and integrated a Firebase database to facilitate user registration and login

**Battery Analysis Algorithm** (Python)

- Developed and optimized a program to efficiently read CSV files, extracting crucial time, current, and voltage values from the battery to compute the power left in our vehicle's accumulator at specific intervals, providing instrumental insight into the efficiency of the vehicle's battery system

**Portfolio Website** (HTML/CSS)

- Designed and deployed a personal portfolio website as an extension of my resume, showcasing my work and experience in a visually engaging manner. Link to [Website](#)

## OTHER

---

Languages: Fluent and literate in Spanish