

Joe Martinez

SOFTWARE DEVELOPER

✉ notjoemartinez@protonmail.com | 🏠 notjoemartinez.com | 📷 NotJoeMartinez | 🌐 NotJoeMartinez

Experience

Zelifcam

SOFTWARE DEVELOPER

San Antonio, TX

April 2025 - August 2025

- Designed and deployed a serverless data-collection pipeline that gathers daily scratch-off odds, prize tables, and retailer availability across all 50 U.S. lotteries, delivering thousands of normalized records per run (AWS Lambda | S3 | CloudWatch | SES | Python Requests/Selenium).
- Engineered large-scale OSINT workflows that extracted and linked thousands of Texas civil & criminal court dockets to county CAD (property-tax) rolls, producing a unified defendant-to-property view for real-estate investors (Python | PostgreSQL | Pandas).

Self-Employed

FREELANCE SOFTWARE CONSULTANT

San Antonio, TX

May 2023 - March 2025

- Built alertpage.ai, a realtime AI-Powered incident classification, geolocation, and notification system for alertpage.net.
- Developed Web Scraping and Data Visualization Tools for Austin-Based Real Estate Investment Firm, with bs4 and vue.js
- Used PostgreSQL pgvector for a Retrieval Augmented Generation-Based Search Engine for Teachable.com Course Content

Flex Radio Systems

SOFTWARE ENGINEERING INTERN

Austin, TX

May 2022 - Aug. 2022

- Improved authentication system for .NET-Based (WPF) Radio Spectrum Visualization Desktop Application (SmartSDR)
- Fixed networking multiprocessing race condition bug in WPF application
- Developed Embedded Systems and Digital Signal Processing Applications Using C/C++

Advanced Particle Detector Laboratory at Texas Tech

UNDERGRADUATE RESEARCH ASSISTANT

Lubbock, TX

Jan. 2021 - Oct. 2021

- Coauthored a Paper on the Use of Computer Vision for Quality Control in Particle Detector Construction
- Created sqlite based model performance and dataset tracking system
- Developed Automated Tools for Training, Reporting and Deploying Machine Learning Models on Remote Servers

Texas Tech University Student Housing - IT Department

IT STUDENT ASSISTANT

Lubbock, TX

Oct. 2020 - Jan. 2021

- Developed python cli tool to generate custom time series data for MS SQL Server to prevent Y2K like bug before 2021
- Automated Legacy Excel-Based Processes Using Python and VBS for compatibility with MS SQL Server
- Maintained Production PHP LAMP-Stack Web Applications Utilized by Thousands of Users

FlowGlobe.io

WEB DESIGNER

San Antonio, TX

Oct 2018 - May 2019

- Designed and Built Custom WordPress Sites for Small Businesses Within the San Antonio Area
- Integrated Analytics Tools for Digital Marketing Campaigns to Increase Client Conversion Rates

Projects

yt-fts (<https://github.com/NotJoeMartinez/yt-fts>)

COMMAND-LINE FULL-TEXT SEARCH ENGINE FOR YOUTUBE

- 1.6k stars on GitHub, hundreds of monthly pypi downloads
- Python, Sqlite, ChromaDB, PyTest Open Source, Vector Search, RAG, Command Line Tools

copcrawler.com (<https://copcrawler.com>)

AI POWERED POLICE SCANNER AUDIO SEARCH ENGINE AND CRIME MAP

- Implements PostgreSQL pgvector, indexes, functions and stored procedures for GIS data retrieval, user management, logging, metadata tracking and search of tables with over 15 million records
- Allows users to search and visualize over 32k hours of police scanner audio
- Featured on unredacted magazine, a popular open source intelligence magazine
- PostgreSQL, MapBox, CloudFlare Workers, Vue.js, Python, TypeScript

chessInsights.xyz (<https://chessinsights.xyz>)

CHESS.COM DATA VISUALIZATION

- Web application for visualizing and exporting chess.com user data
- Vue.js, Nuxt, Chart.js, Open Source
- Over 200 active users a week

APDL Quality Control (<https://arxiv.org/abs/2203.08969>)

COMPUTER VISION FOR PARTICLE DETECTOR CONSTRUCTION

- Built CNN to classify defects in microchip images
- Custom model and dataset tracking system with sqlite
- Computer Vision, Tensorflow, Pandas, scikit-learn, sqlite

Skills

Frameworks: Vue.js, Express.js, Flask, Click

Languages: JavaScript, TypeScript, C, Python, Java, SQL, Bash, C#, PHP, Ruby, HTML, CSS

Cloud: AWS: EC2/S3/CloudFront/Route 53/SES CloudFlare: Workers/D1/R2/Pages

Other: PostgreSQL, SQLite, Docker, Git, Linux, Nginx, CMake, Chart.js, ChromaDB

Education

Texas Tech University

Lubbock, TX

COMPUTER SCIENCE

2019 - 2023

- Completed coursework in software engineering, algorithms, and data structures
- Gained hands-on experience through research assistant position in Advanced Particle Detector Laboratory
- Developed strong foundation in programming, system design, and problem-solving

University of Texas at San Antonio

San Antonio, TX

MATHEMATICS & COMPUTER SCIENCE

2024 - 2025

- Completed 80 credits toward 120-credit degree program
- Advanced coursework in mathematical theory and computational methods
- Applied academic knowledge to real-world software development projects
- Left program to pursue full-time software development opportunities