

ERWIN MEDINA

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[GITHUB](#) | [LINKEDIN](#) | [PORTFOLIO](#)

EDUCATION

California State University, Fullerton
Master of Science - Computer Science

Expected December 2025

General Assembly
Software Engineering Immersive Bootcamp

May 2021

University of California, Irvine
Bachelor of Science - Applied and Computational Mathematics

June 2017

SKILLS

Languages: C++ | C# | HTML | CSS | JavaScript | MySQL | Python | Visual Basic

Frameworks: .NET | ASP.NET | Bootstrap | Django | Express | React

Additional Tools: BeautifulSoup | Excel | Git/Github | Jira | Node.js | Photoshop | Visual Studio

PROJECTS

Nonprofit Financial Predictor — [Github](#) — CSS | Django | HTML | Javascript | MongoDB | Pandas | Python

- Developed a full stack application for comprehensive nonprofit financial analysis, integrating data acquisition, machine learning predictions, and comparative visualizations.
- Utilized MongoDB to manage and structure a scalable and flexible database, accommodating organizational profiles and a decade of financial filings.
- Created visualizations to highlight state-level financial dynamics and support strategic decision-making.

The Golden Boot — [Github](#) — Bootstrap | CSS | Express | HTML | Node.js | JavaScript | React | Redis

- Developed a mobile-friendly, responsive full-stack application designed to handle soccer information.
- Utilized API endpoints using Express to fetch and serve soccer data from an external football-data API.
- Implemented server-side caching using Redis to improve performance and reduce the load on external API.

Pet Transfer — [Github](#) — AWS | Bootstrap | Express | Heroku | JavaScript | MongoDB | Node.js | React

- Developed a full-stack application that helps users find local pets that need adopting.
- Utilized a third party API to populate form fields; implemented JSON token-based authentication.
- Enhanced UX by highlighting stories using Trello and enabled Google Maps API to filter pets by distance.

EXPERIENCE

Paramount+

Remote

247Sports - Software Engineering Intern

June 2024 — August 2024

- Served as a backend engineer, leveraging Entity Framework and .NET 8 to build and maintain backend systems.
- Engineered backend endpoints to retrieve comprehensive newsletters report data, enabling administrators to track campaign performance metrics such as sends, opens, clicks, and spam complaints. Modernizing the architecture from a monolithic setup to a microservices-based approach.
- Enhanced an existing endpoint to support a new search feature, collaborating closely with the frontend team to ensure seamless integration and adherence to project requirements.
- Developed thorough unit tests using the “arrange, act, assert” methodology, meticulously considering edge cases to ensure data accuracy and prevent exceptions.
- Modernized a legacy feature by porting it from an unmaintained monolithic system to a more efficient architecture. Implemented a mechanism for archiving and relocating threads to optimize database performance, while also rewriting existing tests and creating new ones to validate the integrity of the migrated data.
- Created and updated Data Transfer Objects (DTOs) to facilitate the seamless execution of various backend tasks and ensure smooth data flow between system components.

VCI Construction, LLC

Anaheim, CA

IT Data Specialist

October 2021 — June 2024

- Automated the process of creating 20+ Excel workbooks in Visual Basic, consisting of over 6000 permits and permit statuses, for the construction and project management team, reducing creation time by over 100%.
- Managed and controlled permit statuses by maintaining and updating information in the Excel database management tool, implementing checks, balances, and error handlers to minimize crashes.
- Increased the efficiency of the 3GIS team workflow by automating manual processes, increasing the accuracy of map status updates and reducing the processing time by over 50%.
- Served as the primary point of contact for all Excel-related tasks, handling issues with broken Google Sheets documents and localized workbooks, ensuring smooth and efficient operations.

Paramount+

El Dorado Hills, CA

MaxPreps - Software Engineering Intern

June 2023 — August 2023

- Engineered high-performance API endpoints in C# for MaxPreps' web application, replacing legacy systems, enhancing loading speeds, and ensuring flexible data retrieval for React Front End integration.
- Led the development of an in-house web scraping tool using Python and BeautifulSoup, enabling the extraction of school names, scores, and leagues from states nationwide, increasing MaxPreps' national coverage.
- Migrated old/legacy endpoints from an ASP.NET Web Forms monolith to a modern .NET Core APIs, transitioning application infrastructure from expensive Windows servers to cost-effective Linux environments.
- Participant in daily stand-ups, employing Agile methodologies and Jira for seamless communication, task prioritization, and enhanced project transparency.
- Developed proficiency in Git/GitHub version control, ensuring smooth production deployment for 100k+ users, and utilized Visual Studio for optimized, industry-standard coding practices.

Revel Energy, LLC

Irvine, CA

Energy Analyst

July 2018 — February 2021

- Automated functions and VBA scripts, reducing preliminary proposal development by over 50%.
- Utilized XML/CSV data sources consisting of over 35,000 data points, analyzing metrics with in-house software, tailoring a renewable solution utilizing customer energy usage and annual cost for commercial property owners.
- Extrapolated and interpolated missing data points using projects with similar metrics in location, size, energy usage, and energy rate plan, allowing for a more refined and accurate analysis.
- Collaborated with business developers daily to build out preliminary design layouts in Sketchup and AutoCAD, utilizing the customer's requests, yet also complying with California Fire Code.