Jesus Gonzalez

Aspiring Software Engineer

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TECHNICAL SKILLS

Languages and Tools: C/C++, Python, Java, HTML, JavaScript, Databases (SQL/MySQL/Postgres), AWS, Node.js
Developer Tools: Docker, Git, GitHub
Frameworks and Libraries: React, Next.js, NumPy, TensorFlow, PyTorch, Pygame, pandas, matplotlib
Soft Skills: Analytical, Hardworking, Motivated, Strong Communication, Collaborative, Growth Mindset

EDUCATION

University of California San Diego — Graduation June 2026
Bachelor of Science, Computer Science — ***GPA: 3.56 / 4.0***

PROJECTS

Snake AI Trainer with Reinforcement Learning | *Python, TensorFlow, Pygame, OOP* — Feb 2024
- **Object-Oriented Python Development**, utilized Pygame and TensorFlow, creating a training environment for reinforcement learning.
- Implemented **reinforcement learning algorithms** using TensorFlow to train an AI agent to play Snake.
- Achieved a 90% chance the AI achieves a score over 50 through **hyper-parameter tuning** and model optimization.

Dev Journal (CRUD) | *HTML, CSS, JavaScript, GitHub, Puppeteer, Jest, Git, GitHub* — Apr. 2024 - Jun. 2024
- **Led Agile workflow** with a team of 11: utilized Git for version control across ten successful week-long sprints, managed story points, prioritized features, and implemented CI/CD pipelines; resulting in a 20% increase in development efficiency
- Implemented automated tests using **Jest and Puppeteer**, enhancing code reliability and reducing bugs by 30%.
- Front-end development of a journal application, using HTML, CSS, and JavaScript to create a visually appealing and user-friendly interface.

Galactic Store | *JavaScript, Next.js, React, MongoDB on AWS, Tailwind, Stripe* — Jun. 2024
- Developed using **Next.js and React** for dynamic front-end functionality and Tailwind CSS for responsive design.
- Optimized a **MongoDB** database on **AWS**, reducing data retrieval time by 40% and ensuring efficient data storage and retrieval, enhancing overall performance.
- Integrated Stripe API for secure payment processing, checkout, and transaction function, saving orders to the database.

My Calorie Log | *REST API, Next.js, TypeScript, React, MySQL, Bootstrap* — Jul. 2024
- Developed a **TypeScript**-based **Next.js** application that tracks daily caloric intake, featuring comprehensive logging, searching, and displaying of food items.
- Integrated a **REST API** to manage food item data, enabling efficient communication between client and server and reducing data retrieval time by 25%, improving application responsiveness.
- Implemented **MySQL** for efficient server-side data storage, ensuring reliable and scalable management of food item data.

Book Recommender System | *Python, Flask, TensorFlow, Next.js, TypeScript* — Aug. 2024
- Developed a **Flask API** with a TensorFlow model that recommends books based on cosine similarity between user ratings and pre-trained book embeddings.
- Implemented a **Next.js frontend** in TypeScript, allowing users to submit ratings and receive real-time book recommendations.
- Processed and analyzed over 6 million book ratings, optimizing recommendation efficiency through effective model integration and storage techniques.
- Achieved a significant reduction in **Root Mean Squared Error (RMSE)** from 0.65 to 0.28 by meticulously tuning hyperparameters, improving the precision of book recommendations and overall model performance.

EXPERIENCE

Senior Software Engineer Mentorship — Jun. 2024 - Present
Spotify — *Remote*
- Conduct weekly meetings with senior software engineer to discuss advanced software development techniques and **industry best practices**.
- Participate in practice **coding sessions** to enhance problem-solving skills, code quality, and communication.

Technical Associate — Sep. 2023 - Oct. 2023
JCPenney — *Montebello, CA*
- **Installed and configured hardware systems**, including 20 in-store point of sale terminals (cashier PCs).
- Configured in-store **network systems**, troubleshooting connectivity issues and ensuring secure communication between terminals.