Joaquin Mendoza

530-536-6018 | Email | LinkedIn | GitHub | Website

EDUCATION

San Diego State University — San Diego, CA
B.S. in Computer Science — *Aug. 2021 – Dec. 2024*

- **GPA**: 3.78/4.00 Cumulative, 4.00 Major
- **Relevant Courses**: Machine Learning, Data Science, Database Theory, Algorithms, UNIX System Admin.
- **Extracurriculars**: Waterski Club (Vice President), AI Club (Project Lead), Pickleball Club (D1 Team)

EXPERIENCE

Software Engineer Intern — May 2023 – Present
Real Frequency – Launch Agency — *Spokane, WA (Remote-PT)*

- Develop and oversee a data reporting system using Flask, SQLite, and HTML, saving $50k in labor costs annually.
- Implement data integration solutions using Pandas and SQLAlchemy, cutting data entry time by 25 hours weekly.
- Write automation scripts with Google App Scripts to synchronize G-Suite apps, resulting in 15-hour weekly time savings for the team.

Student Assistant — Dec. 2022 – Present
IT Division, San Diego State University — *San Diego, CA*

- Build instruction-facing Docker containers on National Research Platform's (NRP) hypercluster: Nautilus.
- Manage user access and HPC resource allocation within seven different Kubernetes-hosted JupyterHub instances.
- Streamline weekly feature releases and bug fixes to CSU-wide projects using Git, CI/CD, and Kubernetes.

PROJECTS

Sharp Eye (CS 574) | *Ultralytics, PyTorch, Matplotlib, OpenCV* — Feb. 2024 – May 2024

- Developed a specialized object detection model to track multiple players during pro pickleball videos.
- Achieved a 95% F1-score by fine-tuning the YOLOv8s model on over 740 annotated, augmented video frames.

Real Insights (Real Frequency) | *JavaScript, Flask, HTML/CSS, SQLAlchemy, Plotly* — Aug. 2023 – Jan. 2024

- Built a user analytics system, leveraging a 3rd-party LMS REST API for creating actionable insights.
- Alleviates crucial bottlenecks in client analysis by saving my team over 10 hours in weekly manual data entry.
- Produces 162+ interactive dashboards monthly for 25 sports organizations, using Flask, Plotly, and SQLAlchemy.

Spotify Atlas (CS 574) | *Scikit-Learn, Spotify API, Matplotlib, Pandas* — Feb. 2024

- Designed and implemented a song recommendation engine on a 114,000-song dataset using K-Means clustering.
- Utilized the Spotify API to rectify missing values, ensuring consistent representation of all tracks and genres.

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript
Frameworks: Flask, Google App Scripts
Developer Tools: MS Excel, HTML/CSS, REST APIs, Docker, Kubernetes, Git
Libraries: SQLAlchemy (ORM), SQLite, Pandas, Plotly, Matplotlib