

# Joaquin Mendoza

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## EDUCATION

### San Diego State University

*B.S. in Computer Science*

San Diego, CA

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

### Business Intelligence Analyst

*Real Frequency – Launch Agency*

May 2023 – Present

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

*IT Division, San Diego State University*

Dec. 2022 – Present

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