website: alexmatrajt.github.io La Jolla, California (313) 518-7408 amatrajtfrid@ucsd.edu

EDUCATION

Master of Science in Business Analytics, Rady School of Management

06/2026

University of California, San Diego, CA

Relevant Courses: SQL and ETL, Business Analytics in Marketing, Finance, and Operations (Pending)

Bachelor of Science, Data Science

05/2025

University of Michigan, Ann Arbor, MI

- GPA: 3.7/4.0
- Minor in Mandarin Chinese
- Relevant Courses: Database Management Systems, Intro to ML, Applied Regression Analysis, Conversational AI

EXPERIENCE

Independent Researcher, Datamaze Lab, Ann Arbor, MI

08/2024 - 04/2025

- Developed GPT-4 pipeline for large-scale extraction of causal links between business risks and KPIs from SEC 10-Q filings, uncovering how identified threats affect financial metrics in major social media companies
- Designed prompts with strategic formatting and examples to guide model attention and improve output consistency
- Produced network and time-series visualizations showing shifts in business concerns and key KPIs over time to support investor decision-making

Soccer Data Analytics Intern, Penta Labs, Mexico City, Mexico

07/2024 - 08/2024

Sports data science consulting startup in Mexico City serving local and international professional soccer teams

- Implemented Voronoi-based algorithm to analyze 5,000+ match events, mapping player influence zones and optimizing space exploitation during pressing events
- Delivered heatmaps and charts to top Mexican club, contributing to 39% drop in goals conceded year-over-year

Strategist, Rem on Campus Consulting, Ann Arbor, MI

09/2022 - 12/2022

Consulting club at the Ross School of Business offering pro bono services to small businesses impacted by COVID-19

- Provided inventory tracking improvements for Mexican artisan goods retailer on Michigan Avenue, Chicago
- Designed TikTok strategy and newsletter mock-up to boost brand visibility and drive e-commerce growth
- Presented final recommendations to owner, supported by visuals outlining key insights and implementation steps

PROJECTS

CaloriQ, Capstone Project - AI & Database Team Lead, University of Michigan

01/2025 - 04/2025

Health and wellness website developed in a team of seven to make personalized fitness more accessible through AI

- Engineered prompts for DeepSeek R1 to generate personalized weekly meal and workout plans for users
- Built PostgreSQL database to store user data, integrated with DeepSeek's API for automated plan generation
- Created an empathetic support chatbot to address user questions and ease fitness-related guilt or anxiety

Deep Learning Dog Classifier, Intro to Machine Learning, University of Michigan College of Engineering

11/2024

- Built and trained a CNN using PyTorch to classify Goldens vs. Collies, identifying background bias in Collie images
- Applied transfer learning with 8 additional breeds to boost test AUROC to 0.8544 and reduce non-dog feature reliance

Social Media Platform Database, Database Management Systems, University of Michigan

- Designed relational database and wrote SQL scripts to create, drop, and populate normalized tables with constraints
- Transformed poorly structured dataset into 5 schema-compliant views with advanced SQL queries and joins

SPECIALIZED SKILLS

- Languages/Coding: Python (Pandas, NumPy, Matplotlib, PyTorch, Scikit-learn), R (Tidyverse, ggplot2), SQL, C++
- Modeling Techniques: Regression, Classification, Clustering, Neural Networks, Decision Trees, Random Forest, XGBoost, Hyperparameter Tuning, Transfer Learning, Prompt Engineering, LLM Fine-Tuning, EDA
- Operating Systems: macOS, Linux
- Tools: GitHub, VSCode, Jupyter, RStudio, Docker, Figma, PostgreSQL, SQLite, API Integration, Regex
- Spoken Languages: English (Fluent), Spanish (Native), Mandarin Chinese (Advanced)