

DIEGO ARTEAGA

📞 (661) 219-4382 | ✉️ darteaga520@gmail.com | 🌐 darteaga.me | 🐙 github.com/d-arteaga

EDUCATION

California State University, Northridge

Master of Science in Data Science

Starting August 2025

Northridge, CA

California State University, Northridge

Bachelor of Science in Computer Science (Summa Cum Laude)

May 2025

Northridge, CA

Relevant Coursework in:

- Data Structures, Algorithm Design & Analysis, Software Engineering, Machine Learning, Data Mining, Database Design, Probability & Statistics, Web Engineering, Networks & Security

EXPERIENCE

Video Editor & Performance Analyst

Nov 2021 - March 2025

Los Angeles, CA

- Produced and edited engaging **YouTube** and **TikTok** content for clients, optimizing audio and video workflows using **Ableton Live**, **Adobe Premiere Pro**, **After Effects**, and **Photoshop**, improving overall production efficiency
- Analyzed viewer engagement and performance metrics using **Python** and **Pandas**, uncovering trends that led to data-driven optimizations in content strategies, leading to over **11 million views** and a **15% boost in revenue**
- Performed A/B testing on content formats, identifying key factors that **improved audience engagement by 23%**

Studio Musician

Nov 2021 - Dec 2024

Los Angeles, CA

- Collaborated with diverse teams in high-pressure studio environments, meeting strict deadlines while enhancing communication, teamwork, and problem-solving skills—directly applicable to agile management practices
- Managed social media accounts and album marketing efforts, **increasing audience engagement by 20%**

PROJECTS

Healthcare IoT Device Anomaly Detection | *Python, Scikit-learn, Pandas, Matplotlib, SHAP*

- Built an end-to-end anomaly detection pipeline for wearable health devices using **Isolation Forest** on features engineered from raw **PPG, accelerometer, and temperature data**, improving faulty signal detection by **20%**
- Extracted 20+ statistical, frequency, and correlation-based features from segmented biosignals; used **SHAP** for model interpretability and identified key drivers of hardware faults like motion artifacts and loose sensors.

Lung Cancer Detection | *Python, Jupyter Notebook, TensorFlow, Keras, OpenCV, NumPy*

- Trained a **CNN** using **TensorFlow** on the **LIDC-IDRI CT scan dataset**, leveraging **radiologists' annotations** for malignancy scores and ROI coordinates to extract nodule regions, achieving **94% recall** for lung nodule detection
- Applied **data augmentation** techniques and preprocessed over **10,000 DICOM images** with **OpenCV** and **NumPy**, improving model performance and generalization

Agricultural IoT and Machine Learning Platform | *GitHub, Jira, React, Node.js, Python, Postman, Firebase*

- Designed a real-time dashboard using **React** and **Bootstrap** to visualize environmental sensor data from **Firebase** within a team of 12 students via **GitHub** and **Jira**, supporting Colombian farmers in improving crop yield
- Tested **Python backend APIs** with **Postman** and integrated them with the **React frontend** for real-time data flow
- Developed machine learning algorithms with team to correlate them with plant sickness and crop growth
- **Won 1st Place** at **CSUNposium 2025** for presenting a smart farming project and delivering a self-written speech

Spotify Clone | *React, Node.js, Express.js, MySQL, Vite.js, Axios, Bootstrap*

- Built a **full-stack** music streaming app with **React**, **Node.js**, and **MySQL**, integrating the **Last.fm API** to deliver real-time artist and album metadata via optimized **RESTful APIs**
- Redesigned the UI using **React**, **Vite**, and **Bootstrap** for a modern, responsive experience, adding features like dynamic search, liked songs playlist, and editable user profiles

SKILLS

Programming Languages: Java, Python, JavaScript SQL (MySQL), HTML/CSS, C++

Frameworks/Libraries: React, Node.js, Express.js, Bootstrap, Vite.js, NumPy, Pandas, Matplotlib, Scikit-Learn, TensorFlow

Developer Tools: Git, GitHub, Visual Studio Code, Jira, Jupyter Notebook, Anaconda, NPM, AWS

Languages: English, Spanish, Japanese