# **DIEGO ARTEAGA**

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#### **EDUCATION**

## **California State University, Northridge**

Master of Science in Data Science

California State University, Northridge

Bachelor of Science in Computer Science; Summa Cum Laude

Starting August 2025
Northridge, CA

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 & Analyst**

Los Angeles, CA

Nov 2021 - Feb 2025

- Streamlined audio and video production workflows using Ableton Live, Adobe Premiere Pro, Adobe After Effects, and Photopea, demonstrating efficiency, adaptability, and technical proficiency in digital production tools
- Analyzed viewer engagement and performance metrics using Python and Pandas, uncovering trends that led to data-driven optimizations in content strategies, leading to over 10 million views and a 31% increase in retention
- 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 Library, Pandas

- Detected device-level anomalies (e.g., sensor noise, signal drift) in PPG wearables using Isolation Forest, improving faulty data flagging by 20% and reducing manual review time
- Engineered noise-resistant features (e.g., variance, spectral entropy) from raw PPG and accelerometer data, reducing false positives by 22% and enabling proactive device management

# Lung Cancer Detection | Python, TensorFlow, Keras, OpenCV, Matplotlib

- Trained a multi-view CNN using TensorFlow and Keras on over 3,500 LIDC-IDRI CT scan images, leveraging radiologists' annotations for malignancy scores and ROI coordinates to improve model's recall
- Applied OpenCV for preprocessing and leveraged multiplanar reconstructions visualized with Matplotlib and SimpleITK, improving feature extraction efficiency by 30%

## Agricultural IoT and Machine Learning Platform | GitHub, React, Node.js, Python, Postman

- Designed a real-time dashboard using **React** and **Bootstrap** to visualize sensor data within a team of 12 students via **GitHub** and **Jira**, aimed at helping Colombian farmers monitor weather conditions and improve crop yields
- Conducted backend QA testing with **Python** and **Postman** to validate API endpoints, improving data transmission
- Developed machine learning algorithms with team to correlate them with plant sickness and crop growth
- Presented project at CSUNPosium 2025, delivering a self-written speech on IoT-driven smart farming

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

- Redesigned my personal full-stack music streaming platform, originally built with PHP and JavaScript, using React
  and Bootstrap for a modern, responsive UI, significantly improving user engagement
- Developed a Node.js and Express.js backend with MySQL, optimizing query performance and API response times
- Implemented a real-time search bar, dynamically filtering songs and reducing search latency by 30%

#### **SKILLS**

Programming Languages: Java, JavaScript, Python, 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, Docker

Languages: English, Spanish, Japanese