

DIEGO ARTEAGA

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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 & Analyst

Nov 2021 - March 2025

Los Angeles, CA

- Produced and edited engaging content for **YouTube** and **TikTok**, 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 **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, Matplotlib*

- 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, NumPy, Matplotlib*

- Trained a **CNN** using **TensorFlow** on the **LIDC-IDRI CT scan dataset**, leveraging **radiologists' annotations** for malignancy scores and ROI coordinates to extract lung nodule regions and improve model's recall
- Applied **OpenCV** and **NumPy** to preprocess over **10,000 DICOM images** and used **Matplotlib** with **SimpleITK** for visualization, enhancing feature clarity and model interpretability

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
- **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*

- 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