DIEGO ARTEAGA

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EDUCATION

California State University, Northridge — Starting Fall 2025
Master of Science in Data Science — *Northridge, CA*

California State University, Northridge — May 2025
Bachelor of Science in Computer Science; Summa Cum Laude — *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 - Feb 2025
Los Angeles, CA
- 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 **8.5 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

Lung Cancer Detection Model | *Python, TensorFlow, Keras, OpenCV, Matplotlib* — March 2025 - Present
- Processed and analyzed the **LIDC-IDRI** CT scan time series dataset, working with **over 3,500 sequential medical images** for early lung cancer detection using **Pydicom** for DICOM file management
- Developed comprehensive data visualizations using **Matplotlib, Seaborn, NumPy, SimpleITK, and PyVista** to analyze tissue density distributions, identify structural abnormalities, and generate 3D renderings and multiplanar reconstructions for enhanced diagnostic clarity
- Applied image preprocessing and feature extraction with **OpenCV**, preparing data for model training using **TensorFlow** and **Keras**, aiming for a target recall of 85%

Agricultural IoT and Machine Learning Platform | *React, Next.js, Firebase, Node.js, Python* — Jan 2025 - Present
- Developing an **IoT-driven agricultural platform** within a team of 12 students via **GitHub** and **Jira**, aimed at helping cocoa bean farmers monitor weather conditions and optimize crop health for improved yields
- Designed a real-time dashboard with **React, Next.js**, and **Bootstrap,** visualizing sensor data from **Firebase**, and utilized **Python** and **Postman** to test API endpoints, improving GPS data transmission
- Collaborating with a machine learning sub team working on predictive models for plant sickness and crop growth
- Co-authored a research paper on the platform's application and integration of small-scale IoT technology for agricultural monitoring, submitted to the CSCSU (Computer Science Conference for CSU Undergraduates)

Spotify Clone | *React, Node.js, Express.js, MySQL, Vite.js, Axios, Bootstrap* — Feb 2025
- 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