DIEGO ARTEAGA

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EDUCATION

California State University, Northridge   May 2027
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 for Data Science, Web Engineering, Networks & Security

EXPERIENCE

Unclassifed Paid Intern   Sept 2025 - Present
Los Angeles Valley College   *Los Angeles, CA*
- Managed the Outreach and Recruitment student database using **Microsoft Excel**, ensuring accuracy, confidentiality, and integrity of sensitive student data that supported data-driven decision-making by college leadership
- Guided students at college fairs, collecting & documenting student data to support targeted outreach strategies

Social Media Manager & Video Editor   Nov 2021 - Present
Freelance   *Los Angeles, CA*
- Produced and edited engaging content for **YouTube**, **TikTok**, and **Instagram**, optimizing audio and video workflows using **Ableton Live, Adobe Creative Cloud (Adobe Premiere Pro, Adobe After Effects),** and **Photopea**
- Managed & expanded social media presence with content calendars in **Google Sheets**, shaping platform strategy
- Analyzed **YouTube Studio** and **TikTok analytics** to refine video formats, posting schedules, and thumbnail design; A/B testing and retention analysis drove **19M+ views** and a **27% increase** in audience engagement and revenue

Machine Learning Research Intern   June 2025 - August 2025
California State University, Northridge   *Northridge, CA*
- Led codebase implementation, data preprocessing, and model optimization in a team of 5 for an **IoMT anomaly detection system**, while co-authoring a research paper on deep learning techniques for IoMT anomaly detection
- First author of the research paper, accepted for publication and presentation at **IEEE IEMCON 2025 (UC Berkeley)**

PROJECTS

Hybrid IoMT Anomaly Detection System | *Python, PyTorch, Scikit-learn, Google Colab, Deep Learning*
- Designed a novel anomaly detection system for IoMT networks combining **GraphSAGE (GNN)** and **Performer Transformer** models to detect cyberattacks in medical networks via spatio-temporal graph embeddings
- Preprocessed and integrated four publicly available IoMT datasets to improve model generalization across diverse attack scenarios; achieved superior performance over state-of-the-art models on key evaluation metrics
- Collaborated on the creation of a technical poster, conference-style presentation, and research paper

Lung Cancer Detection | *Python, Jupyter Notebook, TensorFlow, Keras, OpenCV, NumPy*
- Developed a tailored **CNN** using **TensorFlow** on the **LIDC-IDRI CT scan dataset**, leveraging **radiologists' XML annotations** to extract malignancy scores and nodule regions, achieving **94% recall** for lung nodule detection
- Preprocessed **10,000+ DICOM images** & applied **data augmentation** techniques to enhance model 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**, integrating and testing **Python backend APIs**
- Collaborated on machine learning models to correlate environmental data with plant sickness and crop growth
- **Won 1st Place** at **CSUNposium 2025** for presenting a smart farming project and delivering a self-written speech

SKILLS

Programming Languages: Java, Python, JavaScript, SQL (MySQL, Google BigQuery), HTML/CSS, C++
Frameworks/Libraries: React, Node.js, Express.js, Bootstrap, Vite.js, NumPy, Pandas, Matplotlib, Scikit-learn, TensorFlow
Developer Tools: Git, GitHub, VS Code, Jira, Jupyter Notebook, Google Colab, Anaconda, NPM, AWS, Tableau
Office Tools: Google Workspace, Microsoft Office, Spreadsheets (Microsoft Excel, Google Sheets) Overleaf (LaTeX)
Certifications: Google Data Analytics Professional Certificate (Coursera, 2025)
Languages: English, Spanish, Japanese