Dylan Dsouza

San Diego, California

Summary

Aspiring data analyst specializing in machine learning and artificial intelligence. Passionate about using predictive analytics and business intelligence to support strategic decision-making. Value analytical thinking, attention to detail, and enjoy working in collaborative, data-driven environments.

EDUCATION

Bachelor of Science, Data Science | University of California San Diego | GPA: 3.93

Expected Jun 2027

Relevant Coursework: Applied Data Science, Data Structures and Algorithms, Machine Learning Theory, Statistical Analysis

TECHNICAL SKILLS

Languages: Java, Python, C/C++, HTML/CSS, JavaScript, R, SQL

Libraries/Frameworks: NumPy, pandas, scikit-learn, Keras, TensorFlow, OpenCV, Plotly, Streamlit, Xarray, Joblib

Core Competencies: Data Cleaning, Data Visualization, EDA, Feature Engineering, Machine Learning, Predictive Modeling

EXPERIENCE

Undergraduate Researcher - Marine Data Science

May 2025 - Present

Scripps Institution of Oceanography (Dr. Jennifer Smith Lab)

San Diego, CA

- Using Viscore, a UC San Diego-developed photogrammetry and data annotation tool, to generate scaled and oriented photo quadrats for downstream spatial and temporal analysis of 15 coral reef sites in the Central Pacific.
- Actively labeling 9,000+ georeferenced points (400 per site) across multiple time points, classifying coral, algae, and invasive corallimorphs to produce a structured dataset for reef health assessment.

Board Member - Online Content

Oct 2024 – Present

Data Science Student Society at UC San Diego

San Diego, CA

- Research and author data-driven articles on machine learning applications, translating complex technical topics into accessible narratives for a student audience comprising 2,350+ followers and 500+ community members.
- Featured how predictive modeling, photomosaic imaging, and machine learning advance coral reef restoration and wildfire detection, highlighting projects from NASA, UC Berkeley, and UC San Diego's WIFIRE Lab.

Marketing Intern

Jul 2023 – Aug 2023

Bennett Coleman & Co. Ltd. (The Times of India)

Mumbai, India

- Analyzed 56,000+ newspaper headlines using TF-IDF vectorization and multi-output linear regression, training a model to predict relevance scores across business, politics, technology, social issues, and lifestyle categories.
- Delivered a 5-category working prototype classification system with model performance metrics for downstream analysis and integration into existing editorial workflows.

Student Ambassador and Leadership Fellow

Sep 2021 - Nov 2021

Inspirit AI

Remote

- Developed and optimized a skin cancer diagnosis model using Keras CNNs and MobileNet transfer learning on a dataset of 10,000+ images, achieving 93% accuracy and an ROC AUC score of 0.97.
- Applied 5+ optimization techniques including OpenCV image augmentation, Grid Search hyperparameter tuning, and dimensionality reduction (PCA, t-SNE) with feature extraction (SIFT) to enhance model generalization and mitigate bias.

Projects

ENSOcast: Interactive Climate Dashboard

May 2025 - Jul 2025

Personal Project

View Project

- Trained a Random Forest model (82% accuracy) on 40+ years of climate data using feature engineering techniques including lagged variables and temporal encodings to classify El Niño-Southern Oscillation (ENSO) phases.
- Built a production-ready Streamlit dashboard with interactive Plotly visualizations, enabling users to explore ocean temperature trends, evaluate model performance, and train custom prediction models.

Geriasphere: Digital Literacy Website

Aug 2023 - Oct 2023

Personal Project

View Project

- Designed a responsive website to enhance digital literacy among middle-aged and senior citizens in India by providing step-by-step video tutorials for 9 essential mobile apps, including Uber, Google Maps, Zoom, and Gmail.
- Conducted an in-person workshop for 15+ senior citizens to introduce the platform and assist with hands-on learning, embedding Google Forms for continuous community-driven updates to tutorial content.