

Aurelio Barrios

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Education

University of California San Diego Bachelor of Data Science

Sept 2017 - June 2021

- **Courses:** Data Visualization, Data Analysis, Machine Learning Algorithms, Data Structures, Database

Skills

Languages: Python, SQL, Tableau, Javascript, HTML, CSS

Technologies: PyTorch, TensorFlow, pandas, MySQL, AWS, Git, Docker

Personal Projects

Loan Acceptance With FairLearn Package

Los Angeles, CA

Implementing An Ethical Machine Learning Model For Loan Approvals

June 12, 2021

- Built a machine learning model that maintained a respectable accuracy whilst also making sure that loan approvals were fair across sensitive attributes like race and sex
- Used ethical metrics like demographic parity difference and equalized odds difference to make sure loan approval rates were equal across different races
- Also made sure loan predictions were accurate to previous loan approvals measured in the dataset

Complete Machine Learning Project With Python

Los Angeles, CA

Rudimentary Approach To Kaggle Machine Learning Competitions

Dec 15, 2021

- Built a machine learning model that accurately predicted the forest cover type from cartographic variables
- Performed exploratory data analysis on the given dataset which allowed for feature engineering in order to build the best machine learning model
- Built a Stochastic Gradient Descent classifier and a TensorFlow Neural Network that performed 89% and 93% accuracy respectively on the final Kaggle leaderboard test set

Premier League Interactive Dashboard With Highcharts

Los Angeles, CA

Implemented A Data Visualization Dashboard Using JavaScript

Jan 18, 2022

- Implemented an HTML dashboard from scratch using Premier League data from 2009 to present day
- Using the JavaScript based library Highcharts this dashboard displays multiple data visualizations upon picking a specific team and can be used to compare different teams
- Provides data visualizations on important historical stats for Premier League teams which can then be used to perform data analysis on each team