

Aurelio Barrios

aubarrios142@gmail.com | aubarrio.github.io | Los Angeles, CA

Data scientist driven to make a positive impact through data analysis and visualization. Excited to channel natural curiosity and creative problem solving towards leveraging data science in order to solve difficult problems within the tech industry. Determined to continue developing technical skills, communication skills and creative problem-solving skills through hands on experiences.

Education

Bachelor of Science, Data Science

Sept 2017 - June 2021

University of California, San Diego / Halicioğlu Data Science Institute

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

Skills

- **Tools:** Python, Java, Pandas, basic UNIX filesystem operations, NumPy, Scikit-Learn, NLTK, git & GitHub, SQL, R, MapReduce/Hadoop, TensorFlow, PyTorch, AWS, Flask, Spark, D3.js, Tableau, JavaScript, HTML, CSS, additional web-based software for design visualization systems
- **Concepts:** data preparation, data cleaning, data visualization, SQL data model and query language, modeling and schema design, relational database architecture, integrating heterogeneous datasets and deployment at scale, elements of cost-based query optimizations, distributed systems, methods for reasoning and decision-making under uncertainty
- **Relevant soft skills:** Data intuition, teamwork and interpersonal skills, patience, ability to learn new technologies, eagerness to challenge myself in a work force environment

Personal Projects

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

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

Twitch Streamer Recommender System From Scratch

Los Angeles, CA

Deploying An Item-Based Recommender System Using Flask & Twitter Scraped Data

Feb 2, 2022

- Implemented and deployed a Twitch recommender using Flask where a user can get recommendations on which Twitch streamer they may be interested in
- Implemented using the Twitter API web scraper and the item-based collaborative filtering technique