

Final Project Requirements



Suggested Final Project: Demystifying ML

01

Find a problem worth solving, analyzing, or visualizing.

02

Use ML in the context of technologies learned.

03

You must use: Scikit-Learn and/or another machine learning library.

04

You must use at least two of the below:

Python Pandas

HTML/CSS/Bootstrap

JavaScript Leaflet

Google Cloud SQL

Python Matplotlib

JavaScript Plotly

SQL Database

Amazon AWS

JavaScript D3.js

MongoDB Database

Tableau

Suggested Final Project: Demystifying ML



Prepare a 10-min (individual) or 15-min (group) data deep-dive or infrastructure walkthrough that shows ML in the context of what we've already learned.



Example projects:

- Perform a deep dive of existing data using machine learning.
- Create an analysis of existing data to make a prediction, classification, or regression.
- Create a front-end interface that maps to an API to "smarten" the algorithm.
- Create a visualization that continues to learn where clusters lie based on ML. (Use D3 or Plotly to change the visualization.)
- Create an idea with mock data that simulates how machine learning might be used.



The key is to **show** the value of what you know.

Final Project

Think like an analyst!



Do a background check on your data. How do you know that it's trustworthy? How might it be biased? Does it accurately represent the population you're considering?



Back up your conclusions with the numbers, e.g. r-values for correlation (or lack thereof) & scores for ML models.



What are appropriate ways to visualize your findings? Bar/pie/line/scatterplot charts? Interactive tables? A custom D3.js visualization?



How to publish your results? Github pages, Tableau Public, Heroku app, blog post, etc.

Final Project



Strongly encouraged to do individual projects!



Explore data you're excited about & extend your personal portfolio.



Build confidence as independent and capable data analysts!



If you opt for a group project, you must deploy a live, public, interactive website that showcases your work.

