

Chicago Food Establishments

Diego Duque

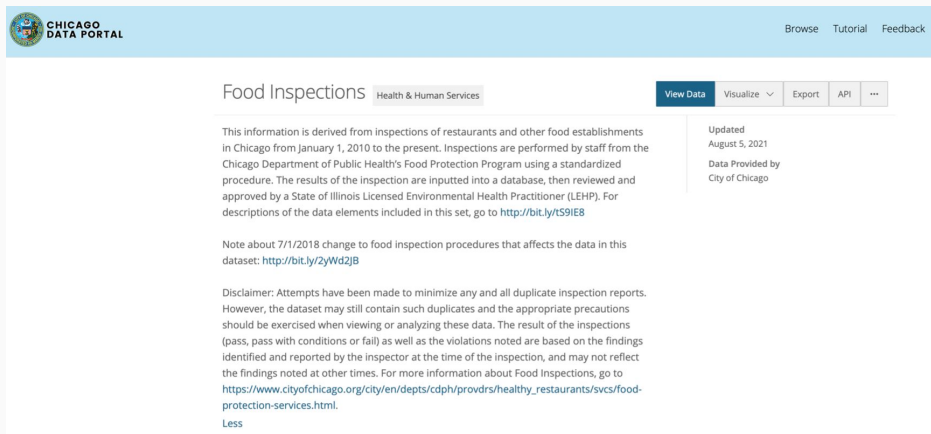


Goal

Interpret Chicago food
establishment inspections

Data

City of Chicago



The screenshot shows the 'Food Inspections' page on the Chicago Data Portal. The header includes the 'CHICAGO DATA PORTAL' logo and navigation links for 'Browse', 'Tutorial', and 'Feedback'. The main content area is titled 'Food Inspections' with a sub-tab 'Health & Human Services'. It features a 'View Data' button and a dropdown menu for 'Visualize', along with 'Export', 'API', and a menu icon. The page contains a detailed description of the data, a note about a 2018 change in inspection procedures, a disclaimer about data accuracy, and a 'Less' link at the bottom.

CHICAGO DATA PORTAL

Browse Tutorial Feedback

Food Inspections Health & Human Services

View Data Visualize Export API --

This information is derived from inspections of restaurants and other food establishments in Chicago from January 1, 2010 to the present. Inspections are performed by staff from the Chicago Department of Public Health's Food Protection Program using a standardized procedure. The results of the inspection are inputted into a database, then reviewed and approved by a State of Illinois Licensed Environmental Health Practitioner (LEHP). For descriptions of the data elements included in this set, go to <http://bit.ly/t59IE8>

Note about 7/1/2018 change to food inspection procedures that affects the data in this dataset: <http://bit.ly/2yWd2JB>

Disclaimer: Attempts have been made to minimize any and all duplicate inspection reports. However, the dataset may still contain such duplicates and the appropriate precautions should be exercised when viewing or analyzing these data. The result of the inspections (pass, pass with conditions or fail) as well as the violations noted are based on the findings identified and reported by the inspector at the time of the inspection, and may not reflect the findings noted at other times. For more information about Food Inspections, go to https://www.cityofchicago.org/city/en/depts/cdph/provdrs/healthy_restaurants/svcs/food-protection-services.html.

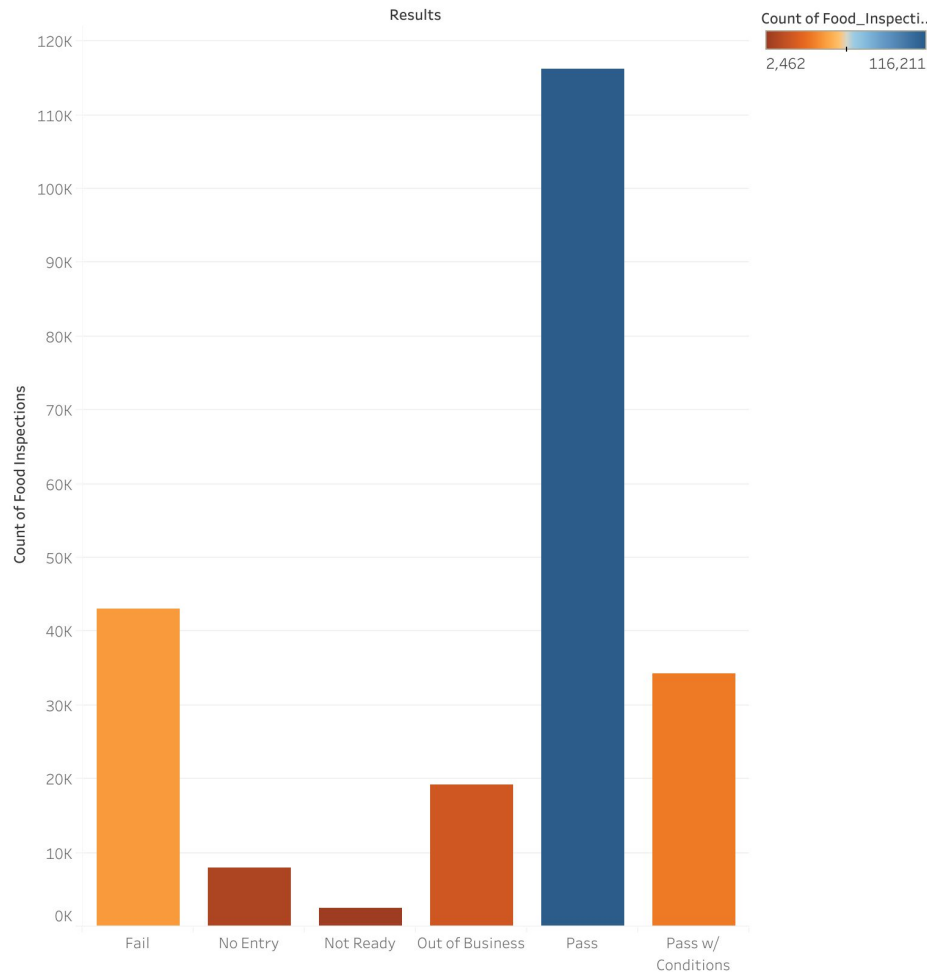
Less

Updated
August 5, 2021
Data Provided by
City of Chicago

- 2010 - 2021 (updated daily)
- 17 features
- 224K inspections

Source: <https://data.cityofchicago.org/Health-Human-Services/Food-Inspections/4ijn-s7e5>

Total Inspections



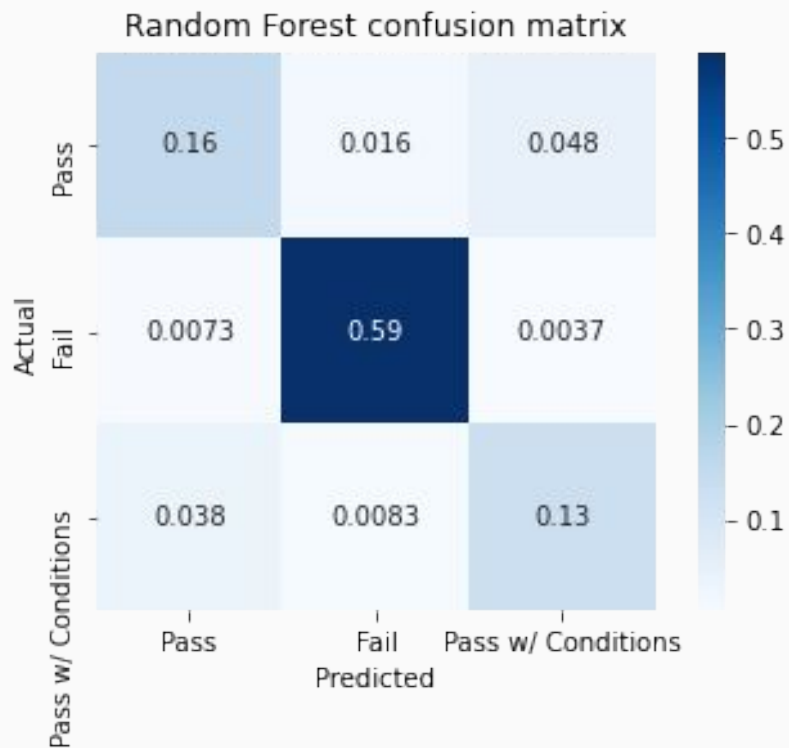
EDA

- Chart generated on **Tableau**
- Results of all inspections 2010 - 2021

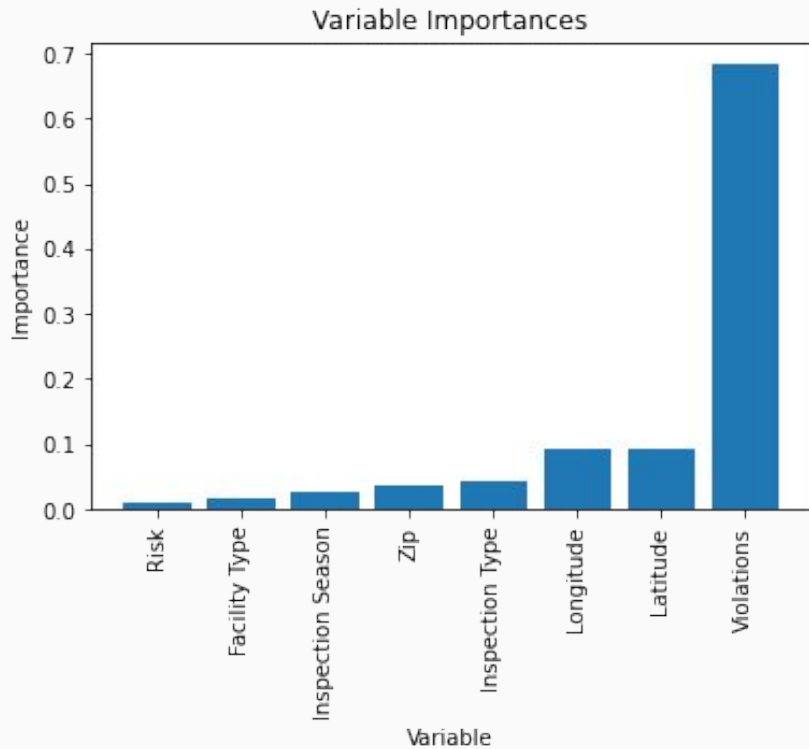
Results will be our **target**

1. Pass
2. Fail
3. Pass w/conditions

Random Forest



Random Forest

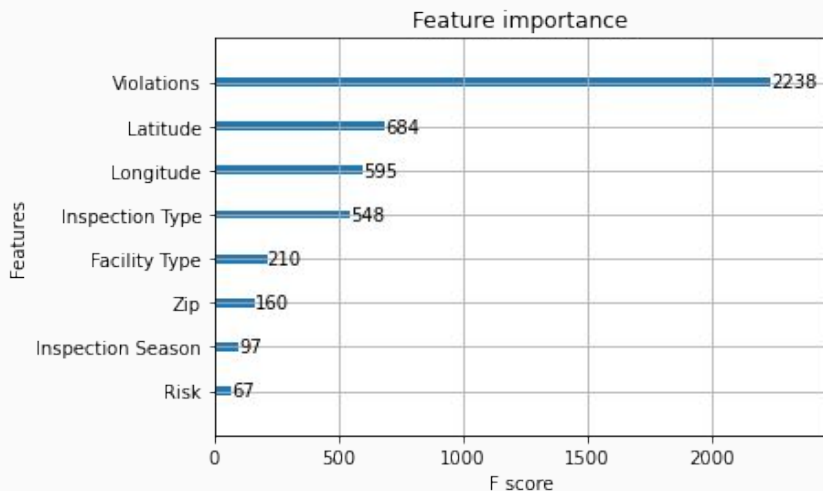


Random Forest

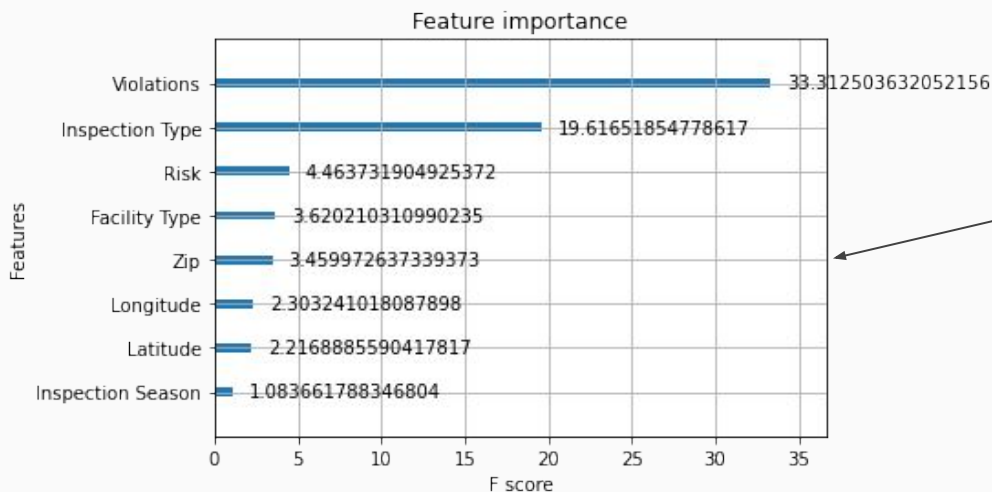
XGBoost

Linear Regression (benchmark)	0.6224
Random Forest (Benchmark)	0.5212
XGBoost (Validation)	0.5217
XGBoost (Test)	0.5097

XGBoost



Default method



Gain method

XGBoost

Future work

- Combine with other dataset (311 complaints, weather)
- More tune on Random Forest



Thanks!

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Remember to get vaccinated!

