
A close-up photograph of a light-colored dog, possibly a Golden Retriever, looking through a chain-link fence. The dog's face is partially obscured by the diamond-shaped mesh of the fence. The background is a soft, out-of-focus blue-grey.

ANIMAL RESCUE CLASSIFIER

> PS: ADOPT DON'T SHOP <

PRESENTED BY STEVIE DISALVO



THE PROBLEM

Rescues view hundreds of applications on the web or download them as a pdf file.

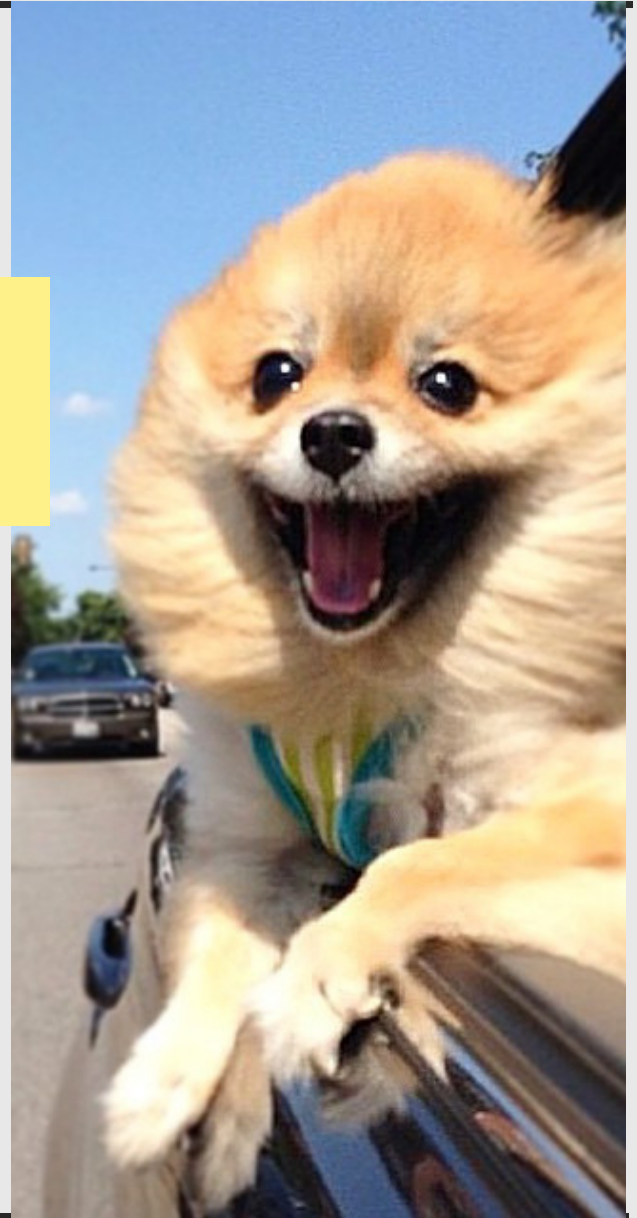
Then, they read through every line to make sure it's a good fit for the adopter and the dog.

THAT'S A LOT OF WORK!

THE SOLUTION

a classification model that determines whether or not applicants should be approved or denied.

WOO THAT'S FAST!





CSV REPORTS

MESSY AF

1500 Accepted Applications
1500 Rejected Applications



THE WEIGHT GENERATOR

The function takes in the training and testing dataframes and ranks all the object columns by the average for each category.

Then groups the columns by category and calculates the mean of the accepted for each category.

THE MODEL

XGBOOST + POLYNOMIAL FEATURES

Used GridSearch to tune the following:

```
max_depth=10,  
gamma=10,  
subsample=.8,  
n_estimators=400
```





HOW ABOUT THOSE METRICS

PRECISION

Rejected .95

Accepted .97

RECALL

Rejected .96

Accepted .96

F1 SCORE

Rejected .96

Accepted .97

