

Project overview and path forward

Factors that affect pet adoption speed

Why pet adoption?

All of our group either likes pets or has pets, and finding the reasons which contribute to the speed at which different pets are adopted. One thing we wanted to bring to the forefront was the idea of adopting from a shelter over a specific pet breeder, since often shelters have pets that remain unadopted for significant amounts of time.

Data Description

Bullet point data - Our data contains thousands of entries of pets, each of which has information on it's breed, fur color, fur length, age, vaccination status, number of pictures, a description of the pet, and the list goes on.

How is the data going to answer our question

We are trying to find out which attributes most effect adoption speeds. First we will need to be able to predict the outcome of adoption speeds of the pets, and from there we can find out the largest factors that play into adoption speed.

Data Exploration

Found 12 nulls in description, dropped due to low number

Binned quantity of pets

Binned fee

Binned photo amount

With desc. Changed to word count, does length of description effect speed of adoption

Description of the analysis phase

Using random forest class

Train test split 75/25

Feature importance

14981 data points

5 possible outcomes, for adoption speed, 0-4

Cleaned and binned data, standard scaler -> train test