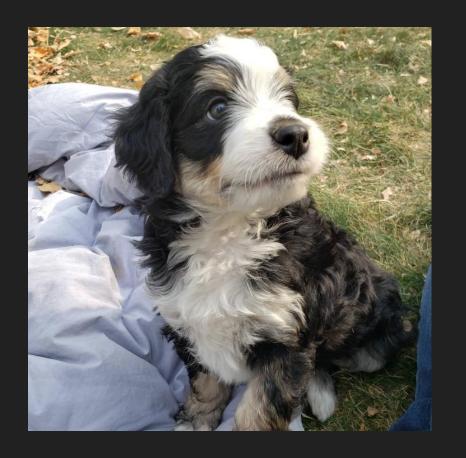# Fur-nishing a friend

A study of factors that influence animal shelter outcomes

Purpose

What will happen to over 26,000 cats and dogs in this animal shelter?

Outcome	Normalized frequency
Adoption	~40%
Transfer	~35%
Return to owner	~18%
Euthanasia	~6%
Died	~1%

Cleaning/EDA

Most popular names:

Name	Frequency
Max	136
Bella	135
Charlie	107
Daisy	106
Lucy	94

Cleaning/EDA

Age Distribution:

Modeling

Models tried: Random Forest, KNN, Logistic Regression, LinearSVC

Best Model: Linear Support Vector Classifier

Scores: 63% accuracy score on both training and test

Most important factors:

- Animal being Spayed or Neutered increased adoption chances 1.3/1.2x (holding all else constant); Pit Bulls were least likely to be adopted
- Pit Bulls / Pit Bull mixes were most likely to be euthanized