

A blue-tinted photograph of two puppies in a wire crate. One puppy is in the foreground, looking down, while another is behind it, looking up. The crate's metal bars are visible.

Animal Outcomes:

Predicting adoption outcomes for shelter animals

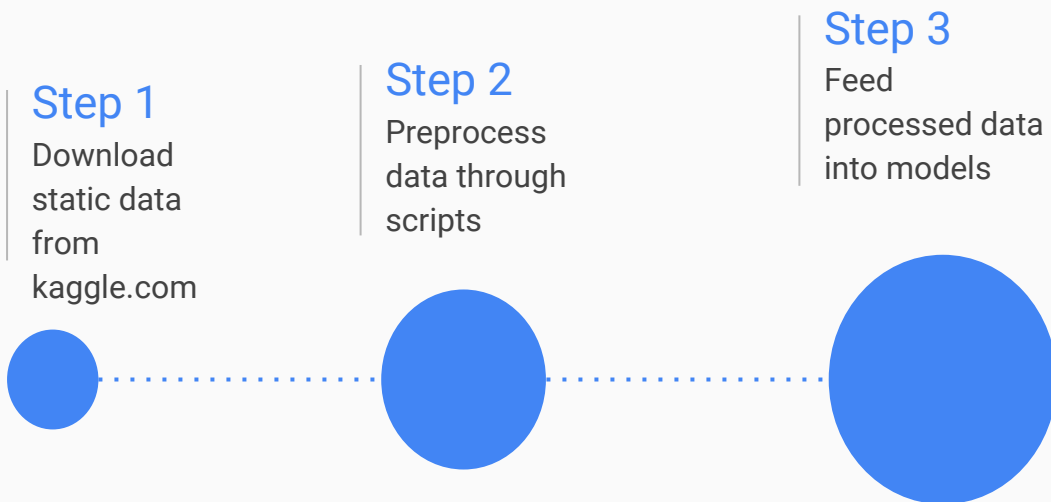
Motivation

Understanding which factors lead to unsuccessful animal outcomes allows shelters to adjust their strategy, leading to high-risk animals having a ***better chance at successful adoption.***

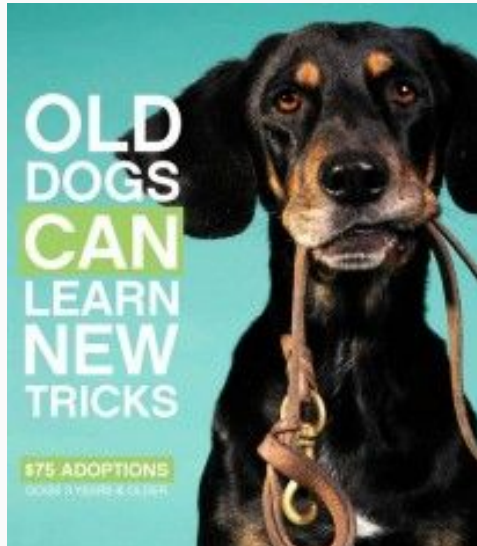


Data Available

- 26,730 training observations
- 11,456 test observations
- From 2013 to 2016
- Response:
 - Outcome class
- Predictors:
 - Name
 - Age
 - Sex
 - Breed
 - Color



Findings and Recommendations



Colonel Snazzypants

Neutered

Domestic Shorthair / Mix

2 months

Ozaukee Campus



Random Forest Classifier

- Evaluation Metrics
 - Log-loss
 - Misclassification rate
- Other models considered
 - Multinomial logistic regression
 - Classification tree

Thank you!

Any questions?

brookekennedy2018@u.northwestern.edu

<https://github.com/bkennedy04/AnimalOutcomes>