# **Capstone Project 1: Project Proposal**

# Background

The Austin Animal Center is the largest no-kill animal shelter in the United States. Their major resources are monetary donation from public and volunteers. As the return, the public wants to learn more about their accomplishment. The statistics of animal incomes and outcomes is key to measure the success of animal shelter. It also provides support for expectation of future work.

The administration committee of the Austin Animal Center wants to publish the achievement to the public help more people learn about animal saving and attract more attention to animal welfare. Besides, they also want to get more detailed information adjust internal recourses.

#### Date resources

The data is available as Kaggle site. It contains the animal incomes and outcomes data from 2013-2017, including aniamal type, breed, age, time in shelter days, etc. There are 3 .csv files, all records of animal intakes, all records if animal outcomes, and records of animal intakes and outcomes.

### Methodology

First, using Python package to import data from csv files. Then clean and transform data into usable date through data wrangling. I will combine the data of animal intakes and animal outcomes under same animal ID. Some column may be deleted or merged. After cleaning the data, I will build Statistical Methods to analyze the data, to explore the correlation of different factors. I will generate data visualizations based on the regression model, the result can be bar graph, line chart, dot plot, and etc. Finally, I will interpret the data result into solution to the problems.

### Result

The final repost should include a word file, jupyter notebook and PPT slices presentation.