Some preliminary thoughts on dailypuppy.com

Label uploaded dog pictures with their breeds.

I used tensorflow by taking an already pre-trained deep NN on a set of categories such as ImageNet and retraining from the existing weights for new class. <https://www.tensorflow.org/tutorials/image_retraining>

Or follow the steps on this repo. <https://github.com/stormy-ua/dog-breeds-classification> ( it takes 1-2 hrs)

For the new class in the top layer, we can merge our dog pictures (labeled ones) with Stanford dog breeds dataset and build our own dog breed classification dense NN model on top of the pre-trained. In this way, we will potentially obtain more accurate classification results. The good part of our puppy pictures is that for each dog we have more than 3 pictures with different angles.

I scrapped the photos from puppy feed on dailypuppy.com. The model can be used to classify the dogs now.

(After we obtain the list of jpgs or urls of the dog pictures, we can separate the labeled ones from unlabeled ones, then merge the labeled ones with Stanford dog dataset and predict/infer the unlabeled ones for our own good)