Landmark Recognition

Beau, David, Saad

https://www.kaggle.com/c/landmark-recognition-challenge

General Problem

Classify Images

- "What is the name of this temple I visited in China? Who created this monument I saw in France? Landmark recognition can help!"

- Similar to MNIST

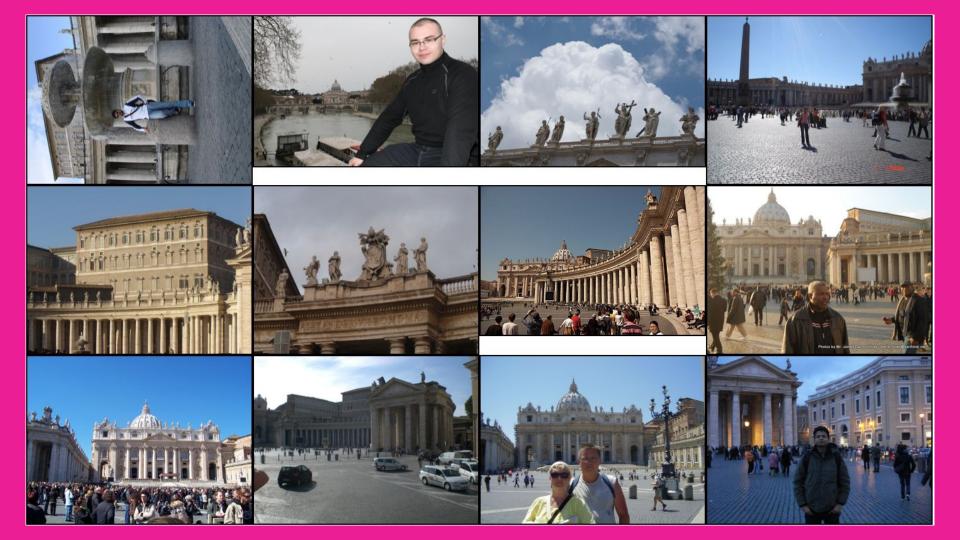 - Instead of 10 categories, we have 1,225,029

Problems

- Different aspect ratios
  - Fix with padding
- Images are huge
  - Subsample to ~ 299 by 299 pixels (RGB)
- User submitted images

Quality of Photos

Solution

Tutorials

Cat or Dog
https://becominghuman.ai/building-an-image-classifier-using-deep-learning-in-python-totally-from-a-beginners-perspective-be8dbaf22dd8

Bird or not Bird
https://medium.com/@ageitgey/machine-learning-is-fun-part-3-deep-learning-and-convolutional-neural-networks-f40359318721

These tutorials are binary (Yes or No), so our final layer will need to be a softmax (similar to MNIST)

Also, we need to do more preprocessing of the images and create valid train/test sets as many landmarks only have one picture in the given training set and the given test set is unlabeled.

THE END