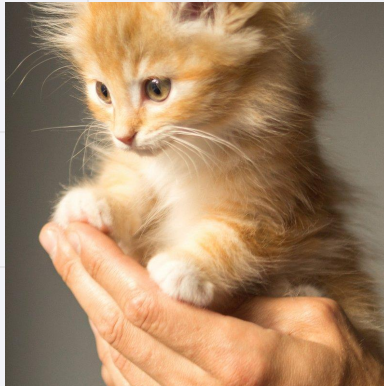# Cat Breed Identify –From images!

ML Project by
Kimberly M.
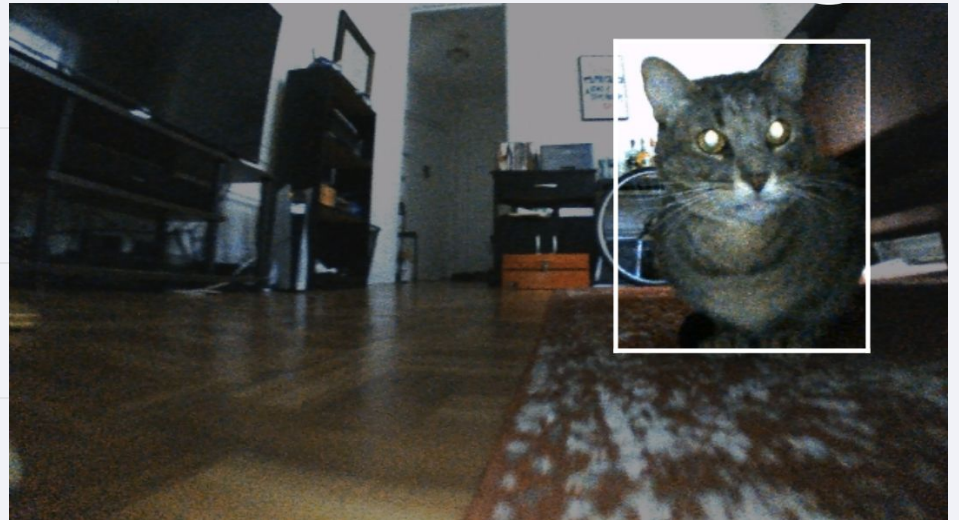
What Problem Do We Solve?

Identification For The Vet

- Accurate breed identification is critical for veterinary diagnosis, genetic counseling, and proper care.

- Many breeds have breed-specific health issues or treatment sensitivities.

- Manual identification by eye is subjective and prone to error.

Solution: Identify from Images

- Build an AI tool to support veterinarians with reliable, fast, breed identification from images.

What is the ML approach used?

Dataset

- Kaggle Cat Breed Dataset: [ma7555](ma7555)
- Picked this dataset due to it having images and being labeled
- Over 80 breeds in this dataset
- Skewed such as american shorthair being common
- Unfortunately jpeg photos corrupt easy
- Lots of processing to remove corrupted photos

Machine Learning Models

- Built deep learning models (CNN–based) to automate cat breed classification.
- Preprocessing:
  - Resized and normalized images for consistency.
  - Applied augmentation (rotations, flips, zooms) to improve generalization.
- Data cleaning to remove corrupted images.
- Early stopping and batch normalization for model stability.

Let's look at the results and Demo!

Thank You!