Finding Homes for Fuzzy Friends

Using AI to connect owners with unwanted dogs and cats

OUR TEAM

John Newcomb

Dog Owner
Assistant Data Scientist

Allie

Industry Expert
Lead Data Scientist

01

INTRODUCTION

Overview of Problem, Company, & Opportunity

02

Data & Methods

Our Solution to the Problem

03

Results

Analysis of Findings

04

CONCLUSION

Recommendations & Future Research

“

You cannot share your life with a dog...or a cat, and not know perfectly well that animals have personalities and minds and feelings.

— Jane Goodall

01

Introduction

Overview of Problem,
Company, and Opportunity

In 1 year,

An average of

6,300,000

Dogs & cats enter U.S.
animal shelters.

930,000

Shelter animals euthanized.

1 in 6

PetFinder.my

"eBay for Animals"

Unwanted Pets

- Strays
- Babies
- Shelters

Loving Families

- Educated
- Trustworthy

OPPORTUNITY

Cuteness Meter

Software that scores photo attractiveness based on composition

67

02

Data & Methods

Our solution

DATA

Images

Image of the animal per listing

+

Metadata

Metadata on the image per listing

- Eyes?
- Blur?
- Human?

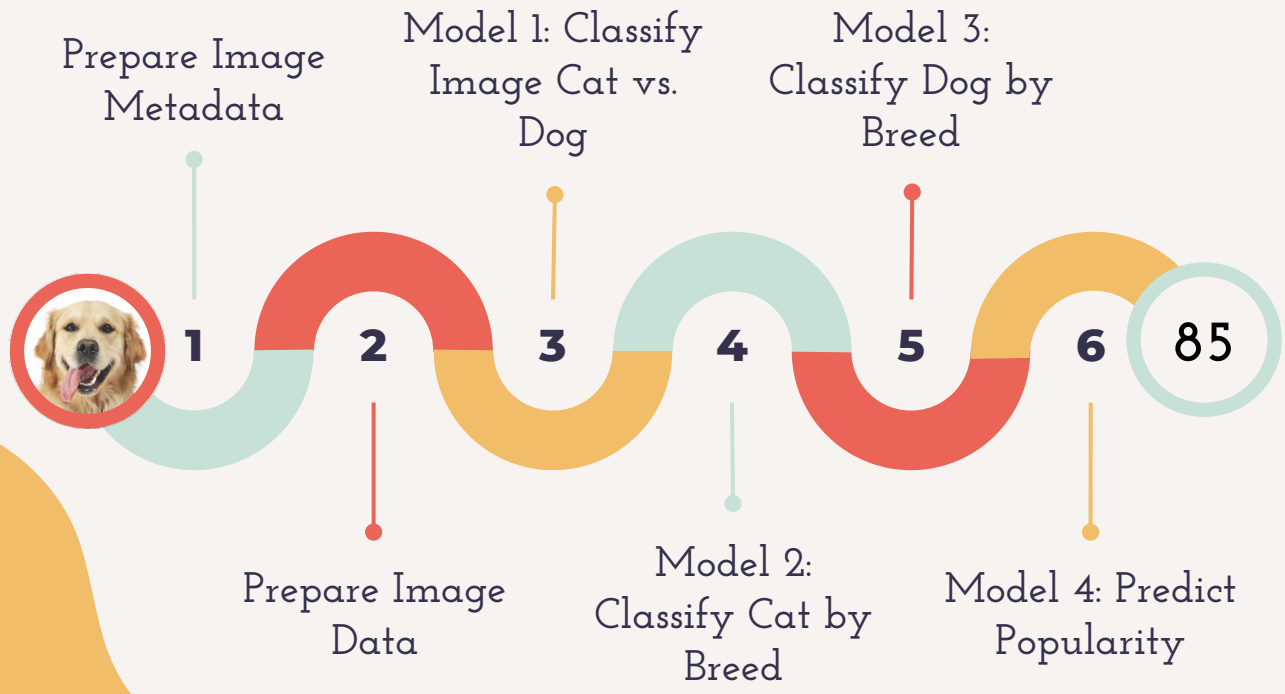
=

Popularity

How popular the listing was based on page view statistics

1 to 100

MODELING



1 & 2. Prepare Data

3. Dog

4. [Skip]

5. Golden Retriever

6. Predict Score

03

Results

Analysis of Findings

Within 5%

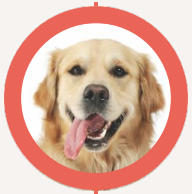
Of Current Best Solution

INFOGRAPHICS

Most Common

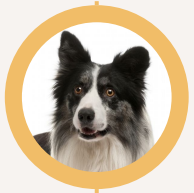
Egyptian Cat,
Above 10% of Listings

Most Sought-After



Golden Retriever,
Mean Score of 79

Most Variable



Border Collie,
Std. Dev. of 34

04

Conclusions

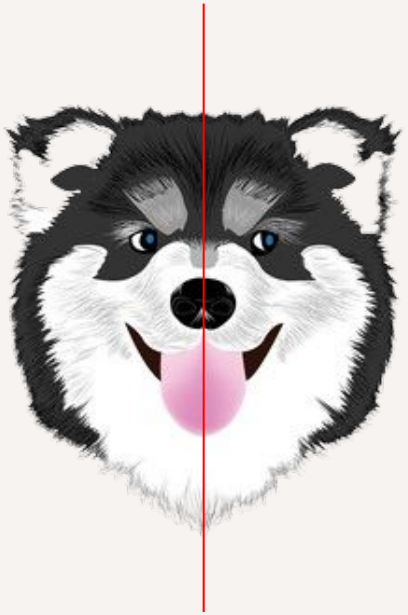
Recommendations &
Future Research

SHORTCOMINGS

- Data Limitations - Beyond the Picture
  - Location?
  - Gender?
- Computational Limitations
  - Funding for GPU Power (AWS)
  - More powerful models

FUTURE RESEARCH

- Stacking more models
- Detect various biometric attributes
  - Health
  - Age
- Detect *design theory* attributes
  - Symmetry
  - Color Balance



THANKS!

Do you have any questions?

jwnl534@gmail.com
1 (941) 210-9729