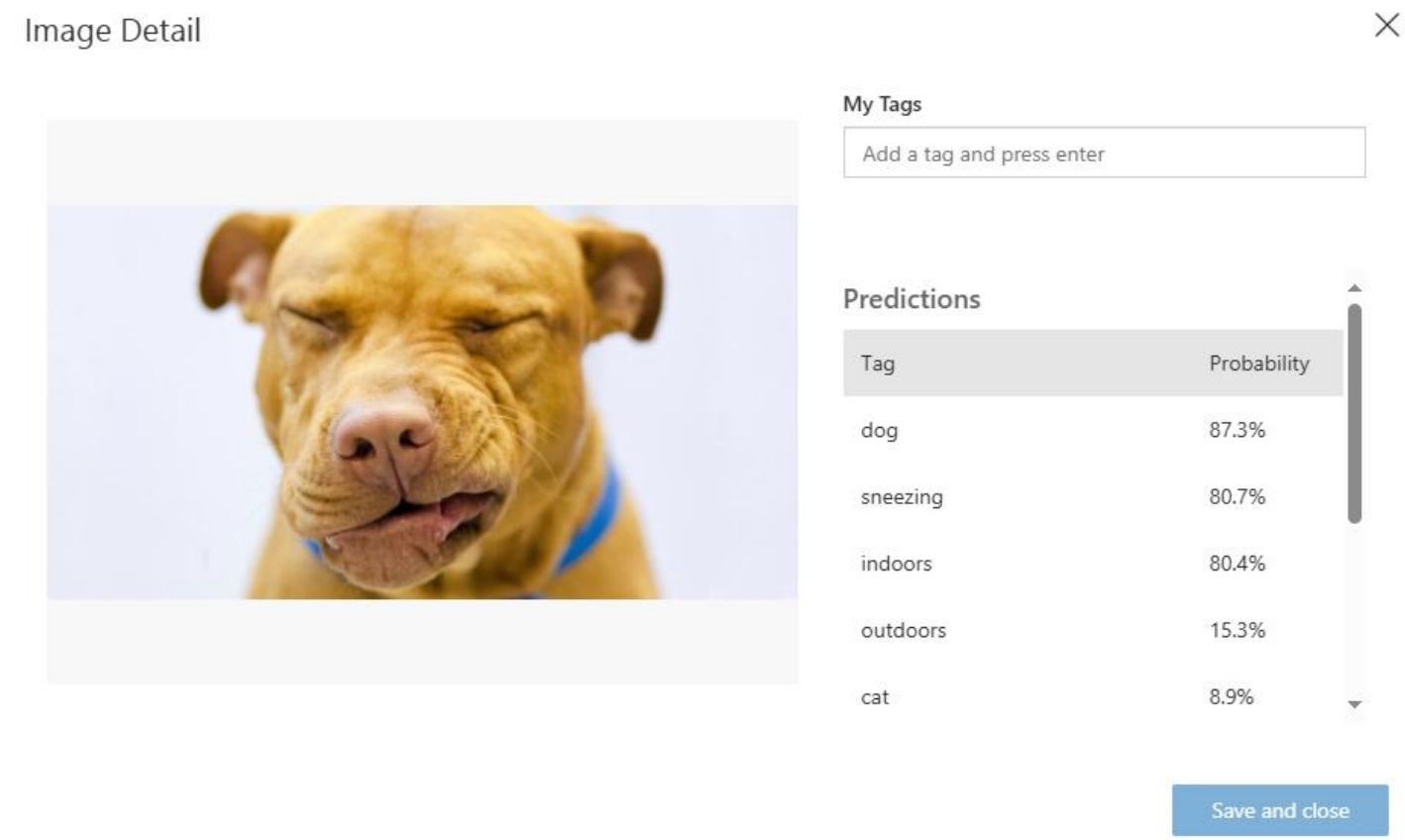
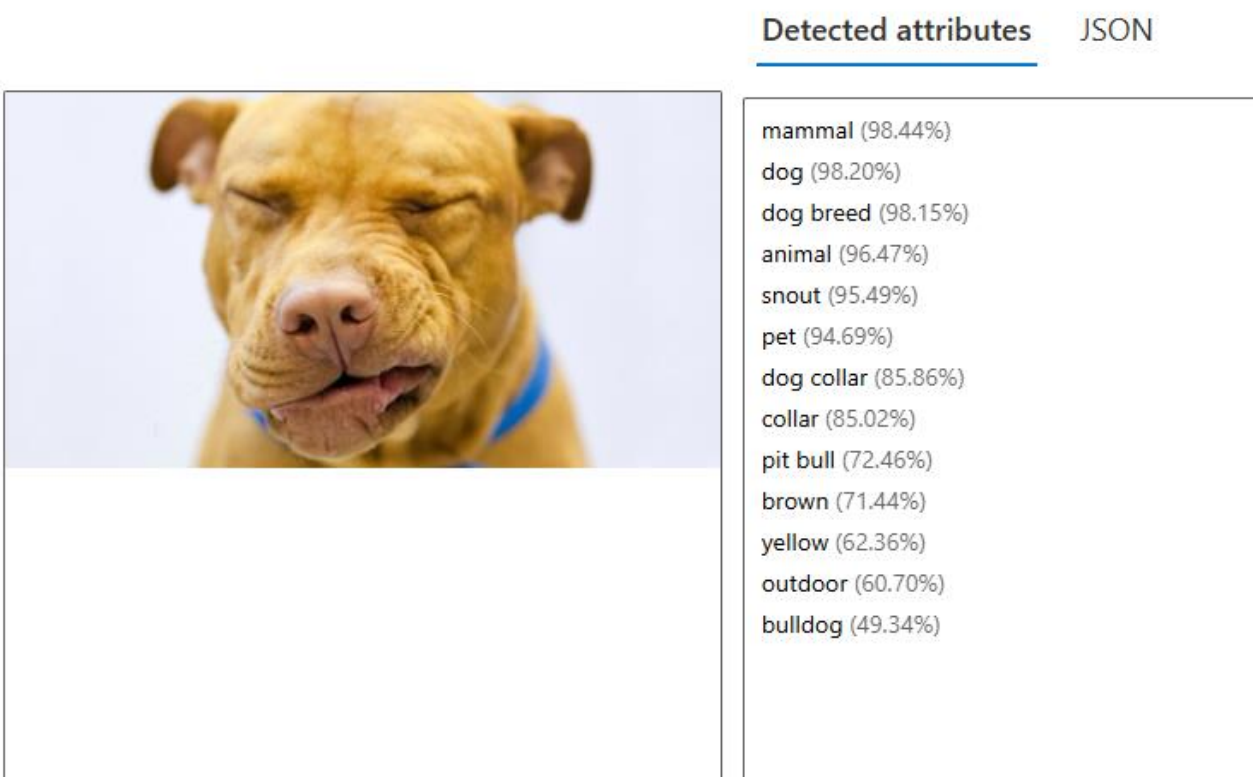
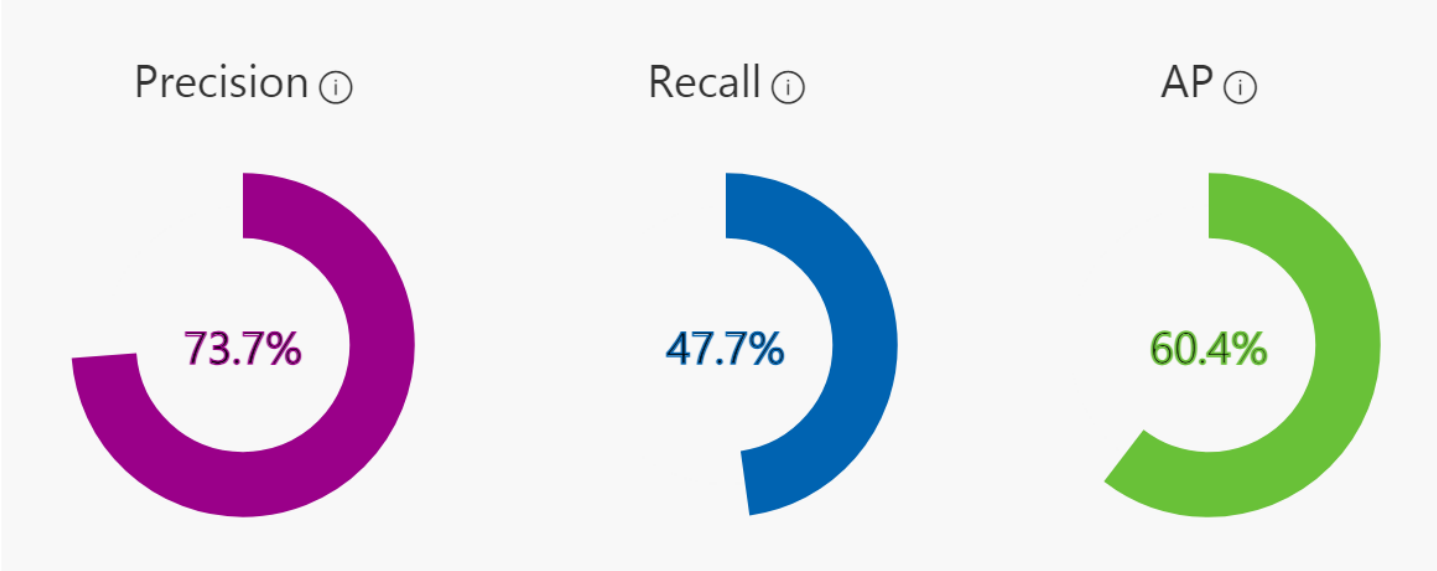
AI Testing



The results for the AI I trained above vs pre-trained Azure Computer Vision below



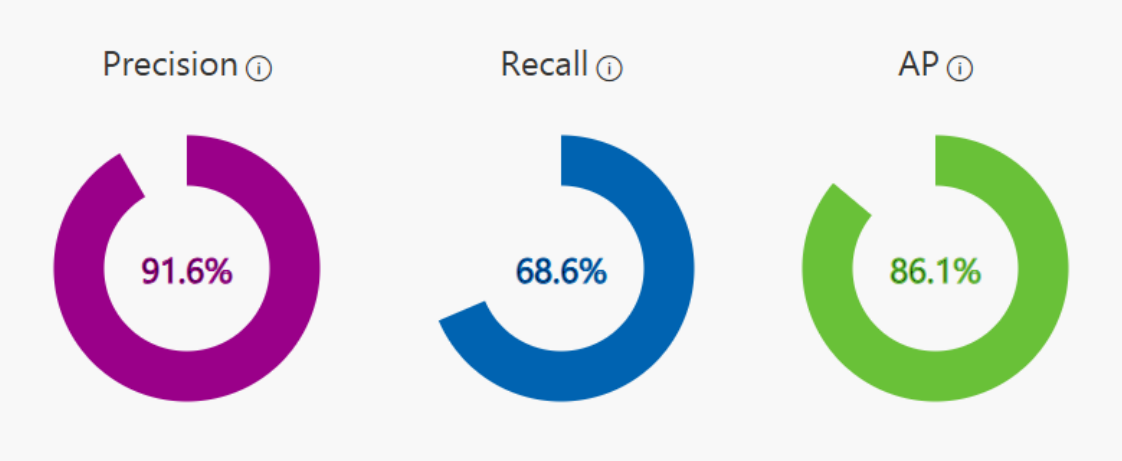
Ai performance Iteration 1



Performance Per Tag

Tag	Precision	Recall	A.P.	Image count
sheep	100.0%	92.3%	99.5%	64
pig	100.0%	80.0%	97.0%	73
happy	100.0%	100.0%	100.0%	6
dog	77.8%	77.8%	75.9%	42
cat	75.0%	75.0%	86.3%	41
horse	50.0%	33.3%	58.9%	16
outdoors	33.3%	14.3%	47.6%	63
energetic	20.0%	100.0%	20.0%	7

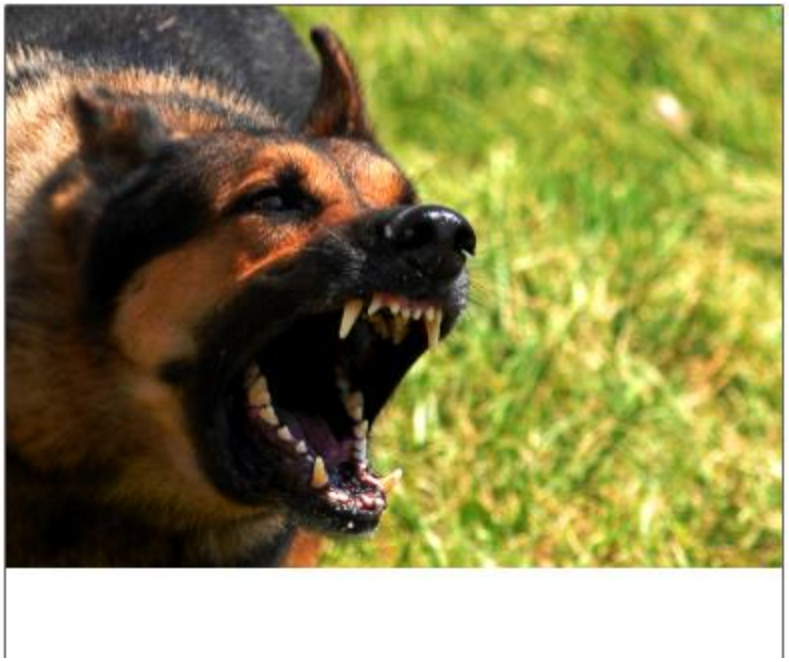
AI Performance Iteration 4 (Advanced training) The precision, recall and AP %s are all



Performance Per Tag

Tag	Precision	Recall	A.P.	Image count
sheep	100.0%	84.6%	93.2%	64
pig	100.0%	100.0%	100.0%	73
indoors	100.0%	25.0%	58.5%	20
cow	100.0%	100.0%	100.0%	79
cat	100.0%	96.2%	99.7%	127
horse	94.1%	100.0%	100.0%	69
dog	92.3%	100.0%	96.1%	118
outdoors	84.0%	67.7%	89.8%	158
standing	33.3%	20.0%	40.3%	51
walking	0.0%	0.0%	22.9%	18
sociable	0.0%	0.0%	19.4%	20
running	0.0%	0.0%	51.0%	13

Azure Computer vison –common tags extractor



grass (99.69%)
mammal (98.15%)
animal (96.67%)
outdoor (94.95%)
dog breed (94.80%)
dog (92.03%)
pet (88.66%)
german shepherd (87.87%)
black (65.75%)
mouth (59.73%)

vs our refined animal behavior analyser

My Tags

Add a tag and press enter

Predictions

Tag	Probability
dog	92.4%
agressive	84.4%
outdoors	77.2%
sociable	14.3%
energetic	13%

Save and close

Also the Ai has gotten much better at analysing when there’s 2 animals together

https://wallpaperacces

or

Browse local files

File formats accepted: jpg, png, bmp
File size should not exceed: 4mb

Using model trained in

Iteration

Iteration 4

Predictions

Tag	Probability
cat	72.9%
dog	66.8%
outdoors	36.4%
laying	34.6%
walking	8%

Vs Iteration 2

Image URL

https://wallpaperacces

or

Browse local files

File formats accepted: jpg, png, bmp
File size should not exceed: 4mb

Using model trained in

Iteration

Iteration 2

Predictions

Tag	Probability
dog	79.3%
outdoors	41.4%
cat	32.6%
pig	24.9%
walking	21.7%

Most importantly the errors in tagging are wrong. Specifically, the 24.9% that the animal is a pig is gone from the top 5 tags, and it actually fell to 1.2% which is a very large improvement.