

Breed	Training	Validation	Test	Total	Breed	Training	Validation	Test	Total
Abyssinian	50	50	98	198	English Setter	50	50	100	200
Bengal	50	50	100	200	German Shorthaired	50	50	100	200
Birman	50	50	100	200	Great Pyrenees	50	50	100	200
Bombay	49	47	88	184	Havanese	50	50	100	200
British Shorthair	50	50	100	200	Japanese Chin	50	50	100	200
Egyptian Mau	47	46	97	190	Keeshond	50	50	99	199
Maine Coon	50	50	100	200	Leonberger	50	50	100	200
Persian	50	50	100	200	Miniature Pinscher	50	50	100	200
Ragdoll	50	50	100	200	Newfoundland	50	46	100	196
Russian Blue	50	50	100	200	Pomeranian	50	50	100	200
Siamese	50	49	100	199	Pug	50	50	100	200
Sphynx	50	50	100	200	Saint Bernard	50	50	100	200
American Bulldog	50	50	100	200	Samoyed	50	50	100	200
American Pit Bull Terrier	50	50	100	200	Scottish Terrier	50	50	99	199
Basset Hound	50	50	100	200	Shiba Inu	50	50	100	200
Beagle	50	50	100	200	Staffordshire Bull Terrier	50	50	89	189
Boxer	50	50	99	199	Wheaten Terrier	50	50	100	200
Chihuahua	50	50	100	200	Yorkshire Terrier	50	50	100	200
English Cocker Spaniel	50	46	100	196	<b>Total</b>	1846	1834	3669	7349

Table 1. **Oxford-IIIT Pet data composition.** The 12 cat breeds followed by the 25 dog breeds.

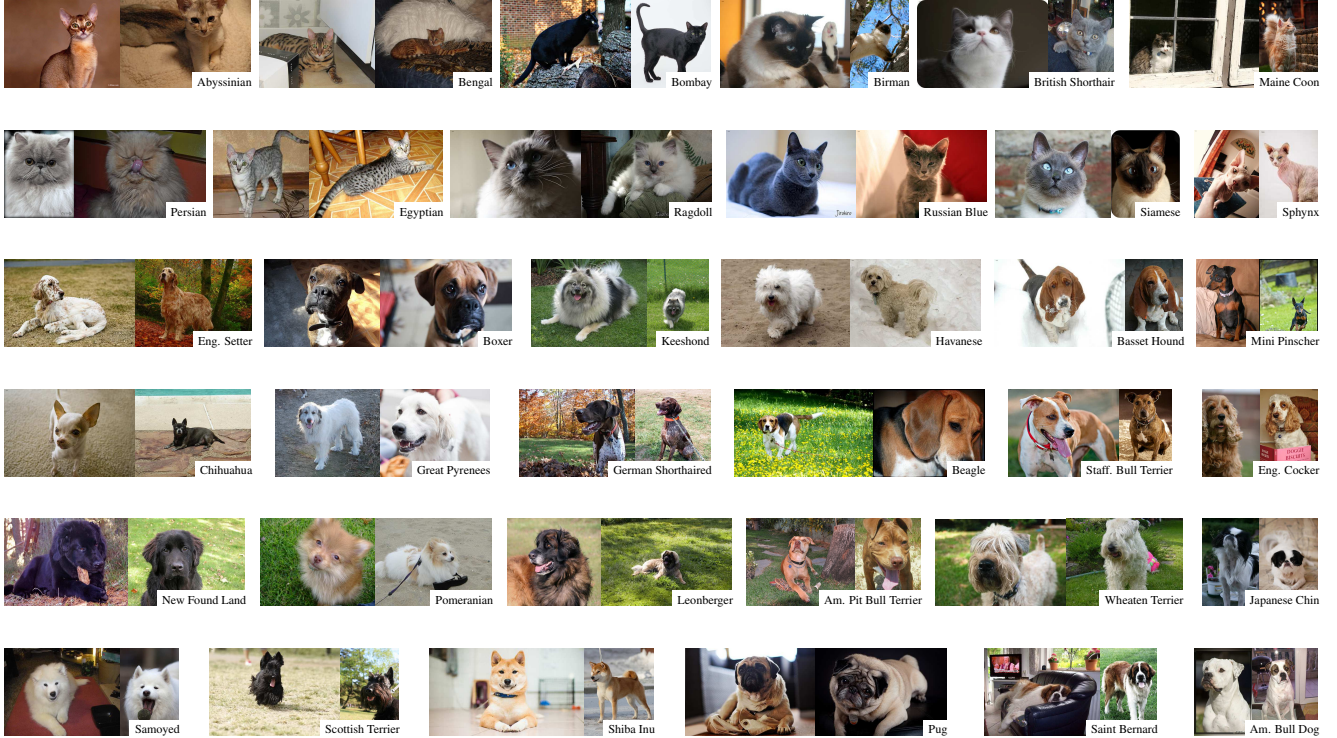


Figure 2. Example images from the Oxford-IIIT Pet data. Two images per breed are shown side by side to illustrate the data variability.

## 2.2. The ASIRRA dataset

Microsoft Research (MSR) proposed the problem of discriminating cats from dogs as a test to tell humans from ma-

chines, and created the *ASIRRA* test ([19], Fig. 3) on this basis. The assumption is that, out of a batch of twelve images of pets, any machine would predict incorrectly the family