

Puppy Perceptions

Project Proposal

MOTIVATION

Over 60.2 million American households are joined by man’s best friend [1]. Many of us know the sheer joy of coming home to our furry friends and being greeted by a happy, wagging tail. What many of us don’t know is that it’s a common misconception that a wagging tail always means happiness and friendliness. In fact, at certain times it can mean quite the opposite. For instance, when a dog’s tail is held high while vibrating rapidly, the dog is likely aggressive and threatening [2]. This is just one of many misconceptions about dog behavior that could lead to some uncomfortable encounters. These errors ultimately make us question how well we can communicate with our dogs.

There are floods of studies reporting how to read a dog’s mind, ranging from specific tail movements to facial muscle activations. Most dog-owners can’t absorb all this data to fluently comprehend their pet, so it would be increasingly beneficial to build a technology to incorporate this data and present it in a coherent way.

Many dog-owners would agree that each dog has their own distinct manner of expressing themselves. Therefore, there is a necessity for individualized tracking in combination with universal behavioral cues to establish a baseline for normal activity.

PROBLEM ANALYSIS

Expense	Average annual cost
Surgical Vet	\$474
Routine Vet	\$257
Food	\$235
Food Treats	\$72
Kennel boarding	\$322
Vitamins	\$58
Groomer/ grooming aids	\$84
Toys	\$47

Figure 2: Basic Annual Expenses for Dogs [2]

A prominent example of when this technology could be objectively useful is in the context of owner finances and dog health. Per Figure 2, we can see that the highest average expense of owning a dog is surgery, which is generally a scary and unpleasant experience for everyone involved. If a dog-owner can promptly detect when their dog is feeling ill, they could access the routine vet sooner and potentially avoid or lessen surgical vet costs.

Understanding a dog’s behavior in combination with the current efforts to maintain health, such as surgery, could not only result in deepened dog-human bonds, but also extend the happiness and



Figure 1: An artistic representation of the multitude of positions dog owners analyze daily

WORKS CITED

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