

The MIT Media Laboratory



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Rover@Home

Remote interaction for homebound dogs




Gary Wilkes clicker training "Charlie" at the MIT Media Lab. Note the yellow alley-oop in the foreground

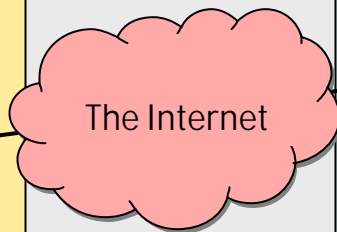
"Clicker training" is an established animal training technique based on applied operant conditioning that associates the sound of a toy clicker with a food reward. Clicker training is not only a powerful method for shaping desired behaviors, but also an enjoyable interaction between owner and dog. Rover@Home places the clicker training artifacts under computer control, allowing remotely located owners to interact with their homebound pets.

When adapting technology for use with dogs, we must pay careful attention to how they sense the world, how they process this sensory information, and how they render actions back upon the world. Interactions between dogs and computers must recreate a subset of reality that is meaningful to the dog.

At Work



Laptop runs web page containing video stream of pet dog, and enables owner to remotely "click" and treat.



At Home



- Webcam lets owner watch dog during sessions.
- Dog hears owner's voice and clicker sound through PC speakers.
- Owner releases treats from feeder when trick performance is acceptable
- Sensored squeeze toy and "Alley-Oop" are props owner can use to train a command such as "touch panda".
- Lonely homebound dog can play with owner