

What is My Dog doing Now? Modeling Dog Behavior from Live Stream

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Motivation: While nowadays' dog cameras provide a live perception of our fur friends, their lack of semantic interpretation makes it hard for owners to respond immediately. We try to close the gap by modeling dog postures as well as motions using image processing technologies.

Goal and Methodology

Goal: This project will focus on the detection and analysis of the dog postures and motions based on dog camera video streams.

Plan of Action

1. Sample images from frames and label them with dog postures
2. Detect the dog position and classify the status of the dog
3. Test with a different setting of cameras, background and dogs if time permits

Dataset and Initial Results

- Images of 11 month Shiba Dog Keke will be sampled from the frames ($9072000 = 7 \times 24 \times 3600 \times 15$) from a YI Dome Camera 1080p HD camera 24/7 with an FPS of 15 and labeled by ourselves