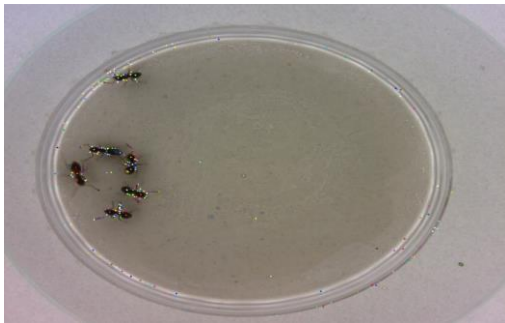1. Failure to extract object feature points and calculate optical flow. In particular, when the camera and the object move simultaneously, the failure rate is high.
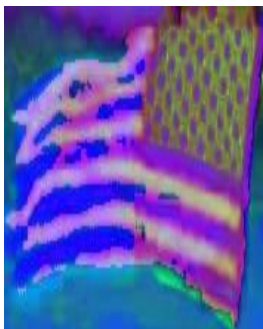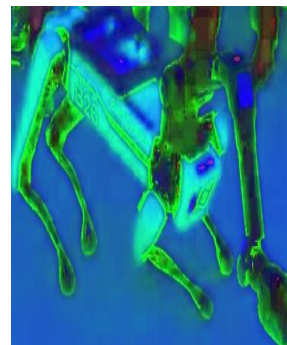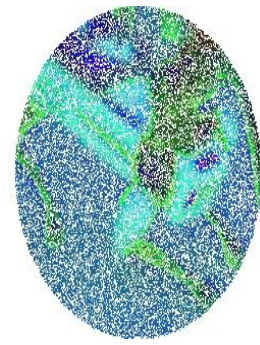

Success

Failure

2. Because each object has different histogram distance values, there is a need to find the adaptive threshold.

Histogram distance: 0.42

Histogram distance: 0.22

3. The matching algorithm should be changed. Our tracker matches objects in a limited area to reduce computational costs. To improve accuracy, objects must be re-detected throughout the entire area.

Matching success

Matching failure

Matching failure

Green box: matching region