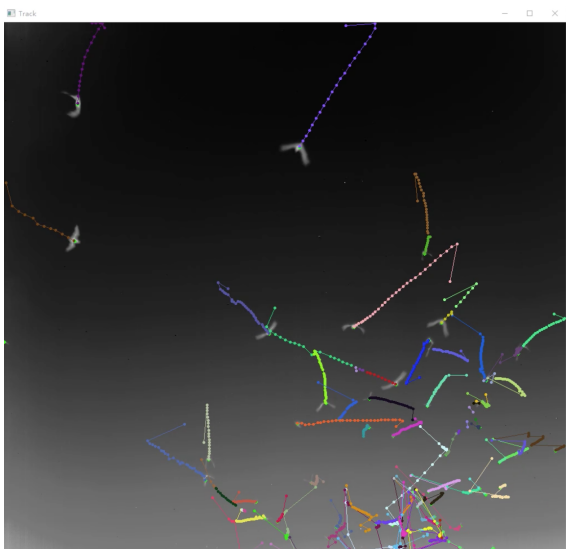
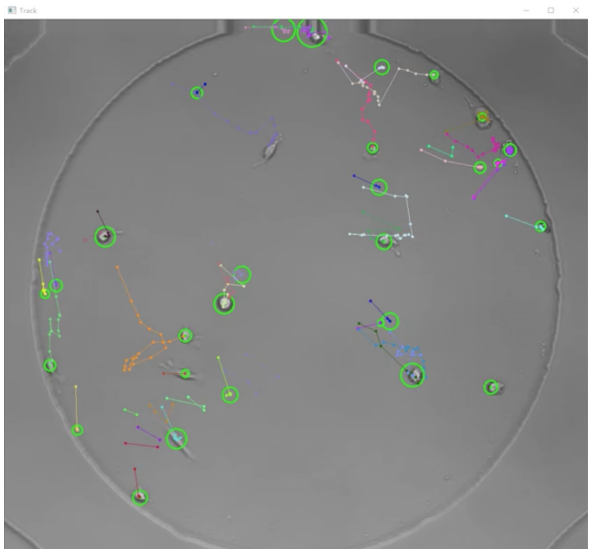
Assignment 5 write-up





1. One challenging situation our tracker succeeds in is when two objects meet at one place our tracker does not lose the tracking path and maintains the path line well after the two objects separate. However, our tracker may fail in the case that our detection for some small objects is not accurate.

2. We begin a new tracker by detecting the position of a new object. However, we fail to terminate the old tracks. We tried to set a timer and a threshold. We thought once the timer passes the threshold, we delete the track, but somehow it does not work

3. when objects touch and occlude each other, we implement the Hungarian bipartite matching algorithm to assign the correct measurements to predicted tracks

4. When there are spurious detections, the tracker may create some false tracks.

5. In our model, we just consider the distance between the objects in subsequent frames and I think the performance of our track is acceptable but I think if we model the velocity, the tracker may work better because it can make the prediction more accurate.