

2018/12/09 6:52 PM

Makes a couple of assumptions that reduce tracking to a trivial task that can be done without even using image information:

- there are almost no false negatives
- there is a very high intersection over union between the detections corresponding to the same object in consecutive frames which might be true for high FPS video

Tracking itself is based on a few simple heuristic steps:

- assigning the detection with the highest IOU to the last election in the previous frame if this exceeds some threshold
- removing tracks with length shorter than some threshold and not containing any high-scoring detections
- starting a new track from all the unassigned detections
- removing any track that was not assigned a detection

supposed to be able to run at 100,000 FPS and is not really meant to be competitive tracker but rather a simple baseline to check if complex checking algorithms are even doing enough to be worth their computation cost;

Its performance is surprisingly competitive, being even better than several other far more complex trackers on the vehicle tracking data sets and getting 13 out of 64 trackers on the more difficult pedestrian tracking data sets; however, as expected, its performance does depend quite heavily on the quality of detections;