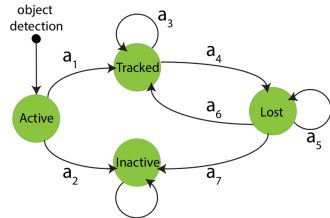
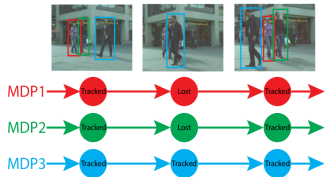


Learning to Track: Online Multi-Object Tracking by Decision Making

Y. Xiang, A. Alahi, and S. Savarese (ICCV 2015)



- ▶ Online multi-object tracking (MOT)
- ▶ Challenge: robustly associating noisy, new detections with previously tracked objects
- ▶ Formulated as decision making in Markov Decision Processes (MDPs), where the lifetime of an object is modeled with a MDP
- ▶ Data association (learning a similarity function) as learning a policy for the MDP as in reinforcement learning
- ▶ Benefiting from both offline- and online-learning for data association
- ▶ The birth/death and appearance/disappearance of targets by treating them as state transitions in the MDP
- ▶ Better than the state-of-the-art on MOT Benchmark