**目标跟踪的应用领域：**video surveillance, intelligent transportation, and human-computer interaction[1 2 3 4 5], activity analysis, and intelligent robotics[6].

1、H. Yang, L. Shao, F. Zheng, L. Wang, and Z. Song. Recent advances and trends in visual tracking: A review. Neurocomputing, 74(18):3823–3831, 2011.

2、A. W. M. Smeulders, D. M. Chu, R. Cucchiara, S. Calderara, A. Dehghan, and M. Shah. Visual tracking: An experimental survey. TPAMI, 36(7):1442–1468, 2014.

3、Y. Wu, J. Lim, and M.-H. Yang. Object tracking benchmark. TPAMI, 37(9):1834–1848, 2015.

4、L. Zhang, W. Wu, T. Chen, N. Strobel, and D. Comaniciu. Robust object tracking using semi-supervised appearance dictionary learning. Pattern Recognition Letters, 62(C):17–23, 2015.

5、L. Cehovin, A. Leonardis, and M. Kristan. Visual object tracking performance measures revisited. TIP, 25(3):1261–1274, 2016.

6、Enable Scale and Aspect Ratio Adaptability in Visual Tracking with Detection Proposals, BMVC, 2015ICCV, Dafei Huang, Lei Luo, Mei Wen, Zhaoyun Chen and Chunyuan Zhang.

**目标跟踪面临的挑战：**scale, rotation,occlusion, background clutter，illumination variation, non-rigid deformation, etc[1].

1、Y. Wu, J. Lim, and M.-H. Yang. Object tracking benchmark. TPAMI, 37(9):1834–1848, 2015.

2、Matej Kristan, Roman Pflugfelder, Ales Leonardis, and et al. The Visual Object Tracking VOT2014 challenge results, 2014. http://votchallenge.net/vot2014/download/vot\_2014\_paper.pdf.

**目标跟踪的准确性accurate：**

跟踪矩形框与GT的IOU、中心距离

**目标跟踪的鲁棒性robust：**

**目标跟踪优化方法：**

1. ADMM(alternating direction method of multipliers)

1、S. Boyd, N. Parikh, E. Chu, B. Peleato, and J. Eckstein. Distributed optimization and statistical learning via the alternating direction method of multipliers. Foundations and Trends R in Machine Learning, 3(1):1–122, 2011.