A Review of Detection-related Multiple Object Tracking in Recent Times

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***Abstract*—Multi-object tracking (MOT) is garnering more attention due to its widespread application in the area of autonomous driving, human-computer interaction, and intelligent video surveillance. Especially in recent years, MOT has rapidly developed thanks to related technologies such as object detection, which has helped in handling interfering factors such as crowded scene occlusion, small objects, and similar appearances. Among these, Detection-based MOT is the mainstream for accurately forming objects' trajectories. Therefore, according to the analysis of the last three years' research, this paper particularly focuses on discussing the continuous optimization strategies of MOT around the development of object detection at each stage. In addition, this article also introduces the commonly used benchmark datasets and related applications of MOT.**

***Keyword*—Multi-object Tracking (MOT), Object detection, Deep learning, Research progress**

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