TPA 2: Motion compensation based automatic tracking of object silhouette, under camera movement

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Problem Statement: Automatic tracking a single foreground object from a video shot having un-constrained camera movement. Camera movement types can be assumed to be pan, tilt and translatory along a linear/curvilinear path.

Input:

- Moving camera video shots containing a single object

Expected Output:

- The object in motion being tracked

Hint for excellence: Special Credit will be given if the designed system could able to (i) automatically track the silhouette without manual initialization and (ii) detect the object from a video shot having a combination of canonical camera movements (eg. translation and zoom).

Additional Material: Dataset [9] and related video processing software will be given to you separately.

References

1. Online Moving Camera Background Subtraction, Ali Elqursh, Ahmed Elgammal, ECCV 2012


