Spatial Transformer Network for Matching Players: Find the Easier Matches

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Problem

- Find Matching Pairs
- Applications: multi-object tracking (MOT), tracklet alignment, player re-id in sports videos, etc.

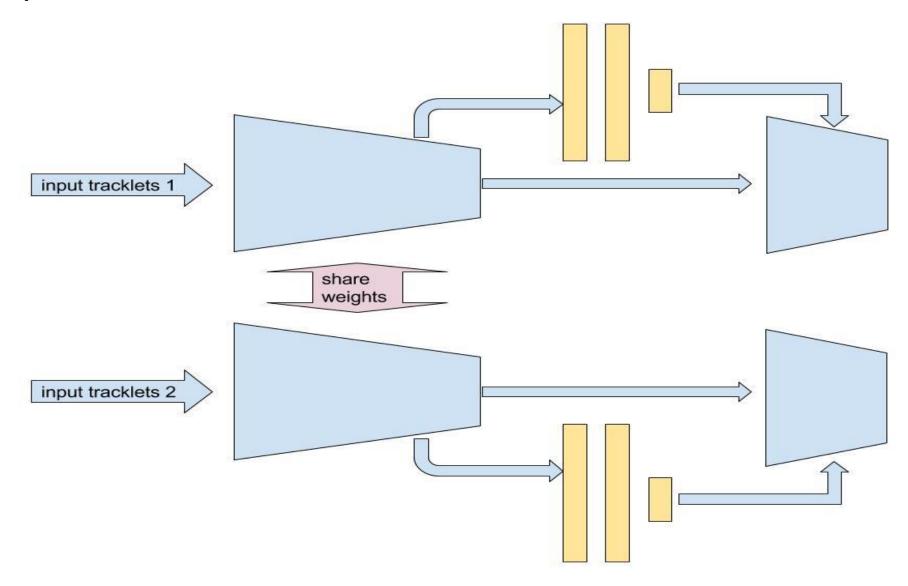
Motivation

- Tracklet alignment problem: affinity model v.s. data association
- Extract features from whole tracklets consider multiple cues
- Find segments in the tracklets that are easier to match in sports videos

Motivation

- Alignment of multiple objects in the sport court (hockey videos) is very different from traditional MOT
- More challenges: frequent shot switches and actions zooming in and out; all players are dressed in same uniform; motion blur

Approach



STN

