Deep Homography-Based Video Stabilization
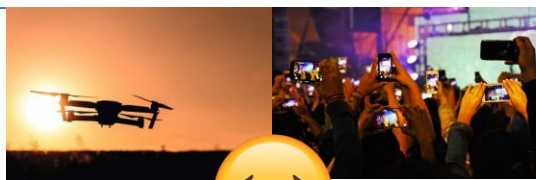
Amateur videos: unstable

Solution:

Digital Video

Stabilization

Tasks:

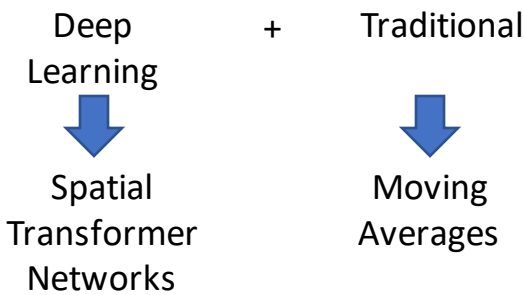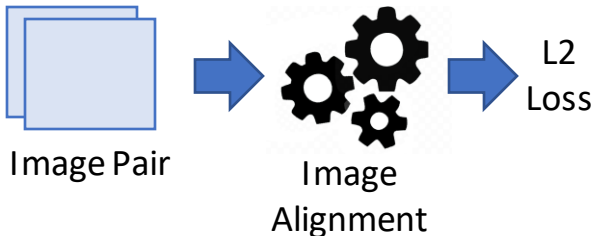|	Feature Extraction	Smoothness
Traditional	😢	😉
Deep Learning	😉	😢

In this paper:

Deep Learning + Traditional

→ Spatial Transformer Networks

→ Moving Averages

Training:

Image Pair → Image Alignment → L2 Loss

Testing: for every frame,

Current & *n* previous Frames → Ours-1

Current & *n/2* previous Frames → Ours-2
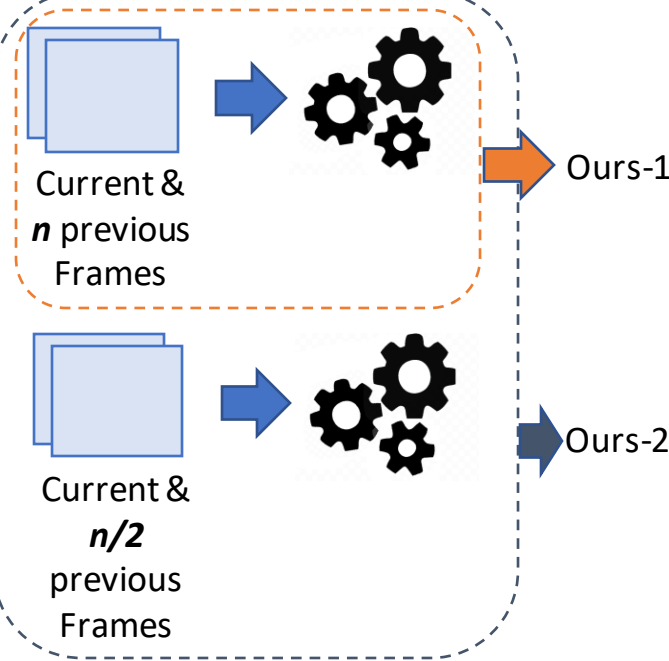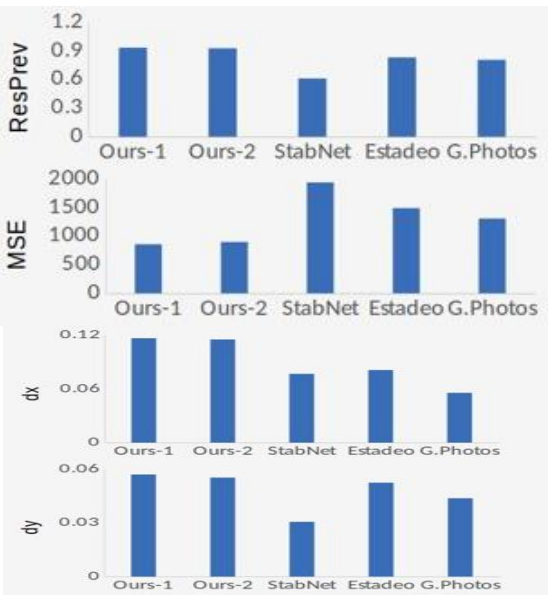
Experimental Results:

Conclusion:

1. DL + Traditional method strengths
2. Robustness to scene content
3. Outperforms the baseline

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