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

Training:
Image Alignment
L2 Loss

Testing:
for every frame,
Current & n previous Frames
Current & n/2 previous Frames

Ours-1
Ours-2

Experimental Results:

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

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