Deep Online Fused Video Stabilization

Zhenmei Shi¹; Fuhao Shi²; Wei-Sheng Lai²; Chia-Kai Liang²; Yingyu Liang¹
¹University of Wisconsin-Madison, ²Google

Deep Fused Video Stabilization
- Gyroscope
- Camera pose representation
- Relative rotation based motion history
- Multi-stage training
- Grid-based frame warping
- Sensor + Optical Flow

Loss
- Smoothness loss
- Optical flow loss
- Distortion loss
- Protrusion loss

Method
- Optical flow
- Grid-based frame warping

Our Model

Our Dataset

References