Maintaining Cutting-Edge Work in Video Forensics

- Motion Stabilization
- Motion Deblur
- Out-of-Focus Deblur
- Unsharp Mask
- Local Contrast Enhancement
- Homomorphic Filtering
- Edge-Sensitive Smoothing

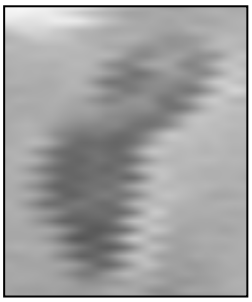
Deinterlacing

Original

Single Field after Vertical Interpolation

Edge Contrast Enhancement

Original Video

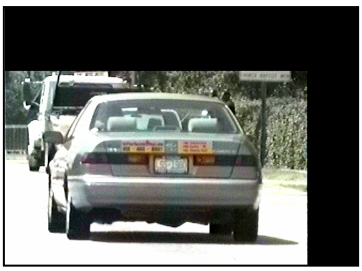


Zoom

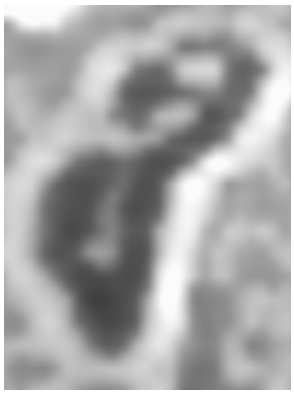
Deinterlace

Motion Stabilization

Original



Stabilized



Edge Contrast Enhancement

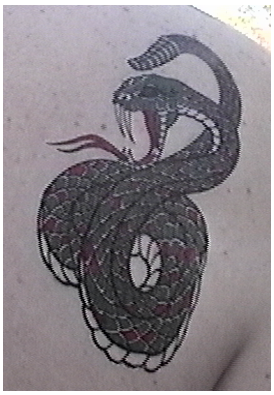


Photo of Suspect Tattoo

Motion Deblur

1. Original

2. Horizontal Motion Deblur

3. Deinterlaced

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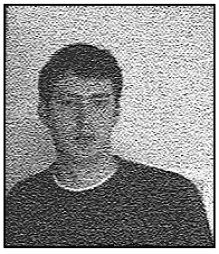
Unsharp Mask

Original

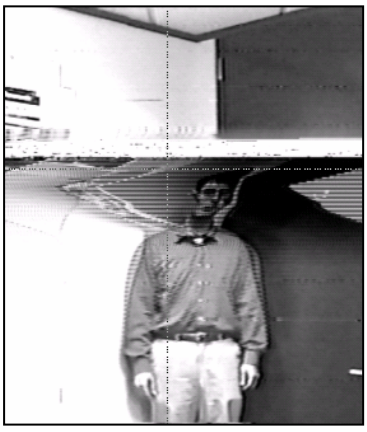
Gain



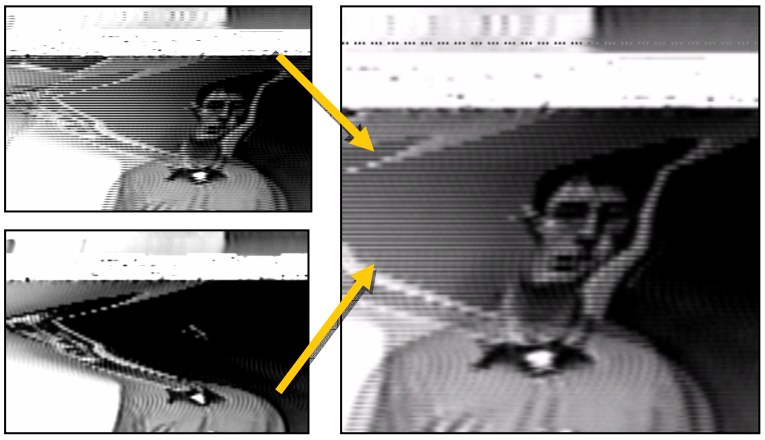
Sharpening filter

Unsharp Mask

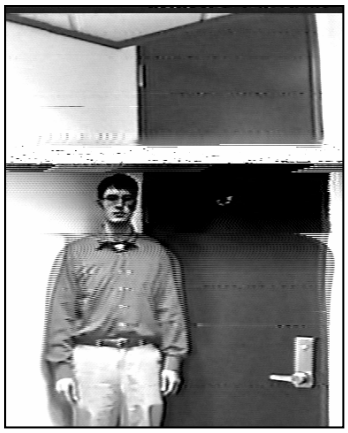
Line Registration



Original Video



Line Manipulation – Corrupted Tape



Final

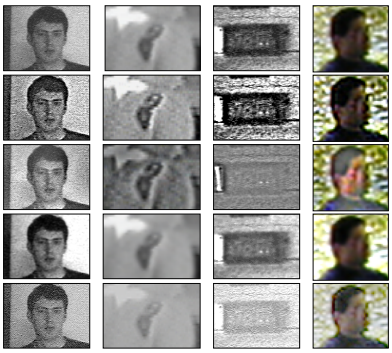
Homomorphic Filtering Comparison

Zoom 2X

Global Gain/Contrast

Homomorphic Filtering

Demultiplexing

Identify specific cameras by clicking on individual frames

Separate Time-Multiplexed Scenes via Image Analysis