Object: Compute Optical Flow

Interface:

Input: Two Color Images

Output: Optical Flow (Horizontal Flow and Vertical Flow)

Flow:

Step1: Convert Two RGB Image Sequences to HSV Channel Images

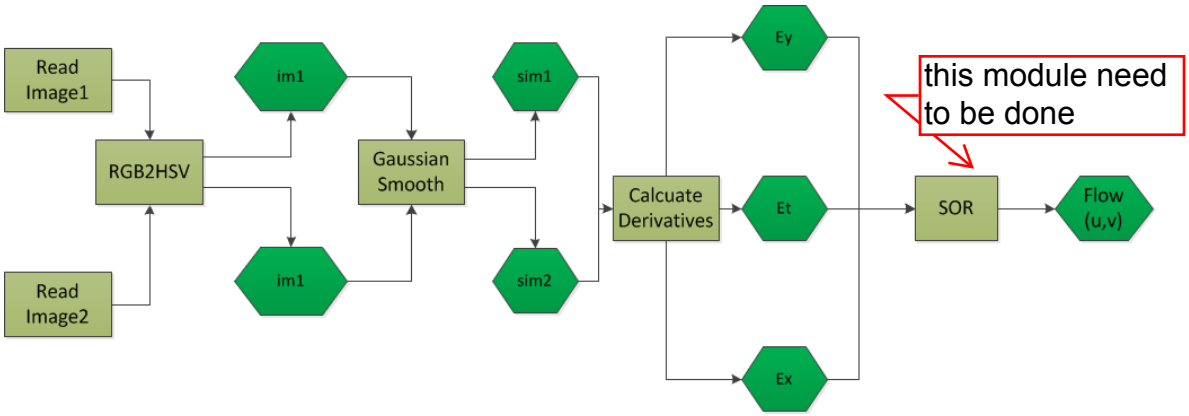
Step2: Smoothing the HSV Channel Images

Step3: Compute Horizontal, Vertical and Temporal Derivatives

Step4: Compute Optical Flow(Choose Successive Over Relaxation)

Step5: Show the Optical Flow Image

Classical Horn and Schunck Flow:



Reference:

1 Real Time Peformance of Variational Optical Flow (P15)

2 Dense Optical Flow Algorithm (Protocol A and Protocol B)

3 sor.c