CMP5550 Programming

Final Project

Due: Monday, 6th of January (23:59)

Background Subtraction

In this programming assignment, you are expected to implement a system for background subtraction for a video of a stationary camera. You need also to evaluate the performance of your system as you are given the ground truth data. You can find the evaluation videos with ground truth at http://www.changedetection.net/. The minimal requirement for this assignment is to evaluate your approach only on the videos from the **Dataset >2012> Baseline** category.

(sample datasete are : highway.zip, office.zip and pedestrians.zip)

Tasks:

1. Perform frame differencing followed by thresholding and report on accuracy of the method
2. Implement median method over selected time window of frames to estimate the value of background for each pixel. Then subtract each frame from the back ground to detect moving pixels.

What to submit:

- Source codes
- Output images
- Performance results (in a word document)