Spliced Video Detector - Help Document

Purpose of software

The purpose of this software is to analyse and detect spliced videos. This software was written in partial fulfilment of an Msc at Queens University. It was developed by Niall Cushnahan.

Usage

Recording a video

To record a video click the record video button located on the home tab. To stop recording press the stop recording button. Videos must have a face in all frames. Videos should be recorded with consistent lighting, or you risk getting false positives in terms of suspicious frames being detected. Recorded videos will be saved as "cam_video.mp4". They must then be chosen by clicking the browse button and selecting the file.

Browsing for a video

To browse for a video click the browse button, then select the video you wish to analyse. Videos must be in the mp4 file format. Videos must be 15 seconds or less.

Analysing Video

To analyse a video that has been selected, click the analyse video button.

Settings

The settings tab is found under the menu bar at the top of the window.

Adjusting settings

To adjust settings simply click the check boxes beside the methods you would like to use.

Saving adjusted settings

To save adjusted settings click the save button at the bottom of page. The settings you choose will not be implemented unless you click save.

Setting the settings back to default

To set the settings back to default click the default settings button at the bottom of page. This will set the settings to a hard coded value chosen by the developer.

Advanced settings

Some settings cannot be changed in the GUI.
This includes:

- OpenCV method
  - This option defines what OpenCV method is used for histogram analysis.
  - This can be altered in the config file in the method section.
  - Can be changed to:
    - Correlation
    - Chi-squared
    - Intersection
    - Hellinger
  - It will default to Hellinger if none of those are chosen.
- Scipy method
  - This option defines what Scipy method is used for histogram analysis.
  - This can be altered in the config file in the method section.
  - Can be changed to:
    - Euclidean
    - Manhattan
    - Chebysev
  - It will default to Euclidean if none of those options are chosen.
- Face detection threshold
  - This option defines the threshold for confidence in face detection.
  - A higher confidence requires the software to be more sure that there Is a face in the image to be accepted.