Video Classification using SIFT

This program uses the SIFT algorithm to classify videos.

Prerequisites

16GB of ram is required if you want to run the program in full (not just doing the demo).

Python3 is required.

The required Python packages can be installed with

```
pip3 install -r requirements.txt
```

OpenCV and ffmpeg are only required if you want to run the program in full (not just doing the demo).

How to Run

To reproduce the results from the paper.

```
python3 demo.py
```

To regenerate all files and rerun the the whole program

```
python3 init.py -r violentflows -p Violence -m max
```

- -r is the root folder of the dataset.
- -p is the positive class name.
- -m is the method. (max or mean)

Use on a different dataset

Make sure the structure is as follows.

```
dataset

movies

category1

movie1.avi

movie2.avi

...

category2
```

movie1.avi movie2.avi ...

Authors

• Garrett Beatty

Future Plans

Get ViF to work. Matlab cannot open AVI files on Mac, so I need to investigate a work-around.

License

This project is licensed under the Apache License - see the <u>LICENSE.md</u> file for details