

Teardrop - a video analysis software

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1 Description

trdrop - pronounced ['teo(r),drap], is a marvelous video analysis software. It can calculate the frame rate of a raw input video, show frame tears, visualize the result and export it into a youtube friendly format.

trdrop_lib is the core library which provides an interface to create a command line and a GUI interface for the provided functionality.

trdrop_cbin is the command line interface which will be configurable through a config file and/or flags. The output can be streamed while being processed from VLC to get a preview.

2 Formal description

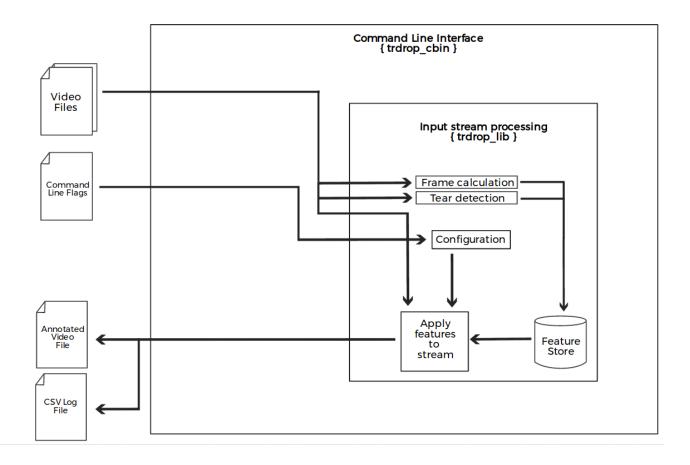
This project covers several themes of C++, mainly defined under the umbrella term offline feature extraction of big raw video data. The task consists of creating a streaming interface to being able to process multiple GB sized videos, apply the feature detection and encode everything into a single video in constant space complexitiy.

2.1 Functionality

The following features are to be included in v0.1:

- determine the real fps of the incoming video files
- show the fps as text in the video
- import up to 4 .raw video files with a size greater than 150 GB
- export the resulting video into a youtube friendly format (google-terms)
- the resulting video can be streamed using VLC while it's being created

2.2 Program Diagram



3 Future work