Cimarron
Stabilisation of videos in modern `C++`

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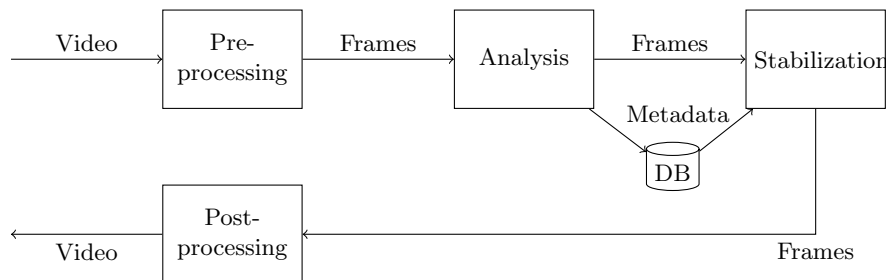*Ludwig-Maximilians-Universität München*

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Chapter 1

Planing

1.1 Idea

1.2 System diagram

1.3 Practical evaluation

This section starts with an describtion of the scoring criterias which will be used in section 1.3.3 to evaluate the in section 1.3.2 described frameworks. The final decision with a detailied explanation is closing this section.

1.3.1 Evaluation criteria

The overall goal of this work is to develop a `C++` driven software video stabilisation. Therefore, the following criteria are the basis to evaluate the perfect `C++` framework with all needed features to extract, analyse and manipulate videos.

Videocodecs The framework needs to be able to handle basic codecs. In detail these are *TBD*

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Extracting frames ***Decoding*** One basic feature of a suitable framework is the extraction of every frame to process it further.

Edge detection One approach to the problem is to recognize edges and to track their movement. Therefore, a suitable framework needs to be able to extract edges and to present them in an efficent way.

Manipulation of frames A suitable framework needs to be able to transform, rotate and warp frames.

Tracking An non-necessary but useful feature is the object tracking. These objects could be used to stabilize videos around an important object.

Merge frames ***Encoding*** Another basic feature of a suitable framework is to merge the manipulated frames back into an video.

1.3.2   Frameworks

1.3.3   Evaluation

1.3.4   Decision