VIAN & WebApp

Project Planning 2018: Protocol (04.01.2018)

Author:
Gaudenz Halter

ERC Advanced Grant FilmColors
Department of Film Studies
University of Zürich

Visualization and MultiMedia Lab
Department of Informatics
University of Zürich

University of Zurich[UZH]

VISUALIZATIONANDMULTIMEDIALAB

1 Basics

- All Methods take a Movie as input, Stills are only a selection of subjectively representative Frames.
- There is a Mikro (Stills), Meta (Movies) and Makro (Database)layer which should all be covered by the WebApp, VIAN does only allow visualization up to the Meta Layer.

2 Use Cases

2.1 Use Case 1: Color Contrast

Question: Does Color-Scheme X apply to a given set of Movies Y?
Description: This is the currently developed Tool,using the Template approximation Algorithm shown by following papers

2.2 Use Case 2: Facial Recognition

Question: Identify each Character as a persistent Object, find it's appearance

2.3 Use Case 3: Skin Tone

Question: Show the Set of Skin-Tones for each Character within a movie
Description: After Facial Recognition, we should compute the skin-tone, for each character.

2.4 Use Case 4: Texture Complexity

Question: Identify each Character as a persistent Object, find it's appearance
Description: Texture Complexity refers to the variation of color within a small region of the Character/Object Layer

2.5 Use Case 5: Similarity

Question: Identify similar movies Based on Filemaker-, Object- and Color-Metadata
Description: The goal is to compute a similarity measure based on all collected features.

2.6 Use Case 6: Visual Momentum

Question: Identify similar movies Based on Filemaker-, Object- and Color-Metadata
Description: Motion : Character Motion/ Camera Motion / Object Motion Character-Associated or Independent Camera Movement

James Eric Cutting Cornell University

3 Project Schedule

- Protoyping Tools: End of March
- Database Setup / VIAN Binding: End of June
- WebApp Basic: End of August
- WebApp Beta: End of Dezember