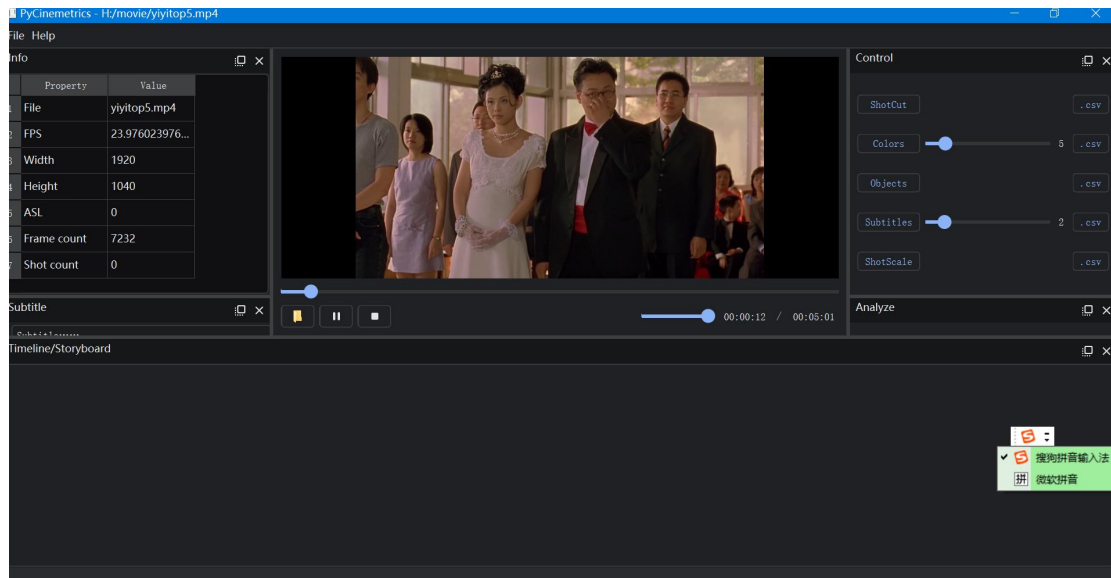


PyCinematics: Computational Cinema Studing Tool

115305288@qq.com <https://movie.yingshinet.com>

1- Open film file

Select a video film file from local disk, and the video will be played. Basic information will be listed in info area.



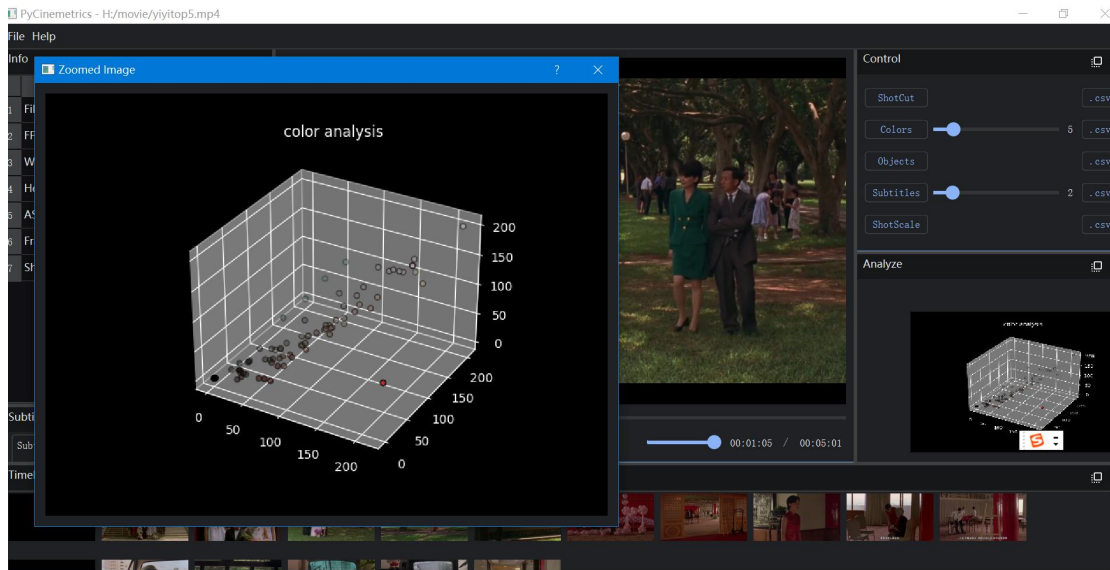
2- Shot boundary detection (TransNetV2)

Click the button [ShotCut], the Shot Boundary Detection module will be triggered. A folder same with main-name of the video file will be created in img folder, and the first frame of each shot will be saved in the new created folder.



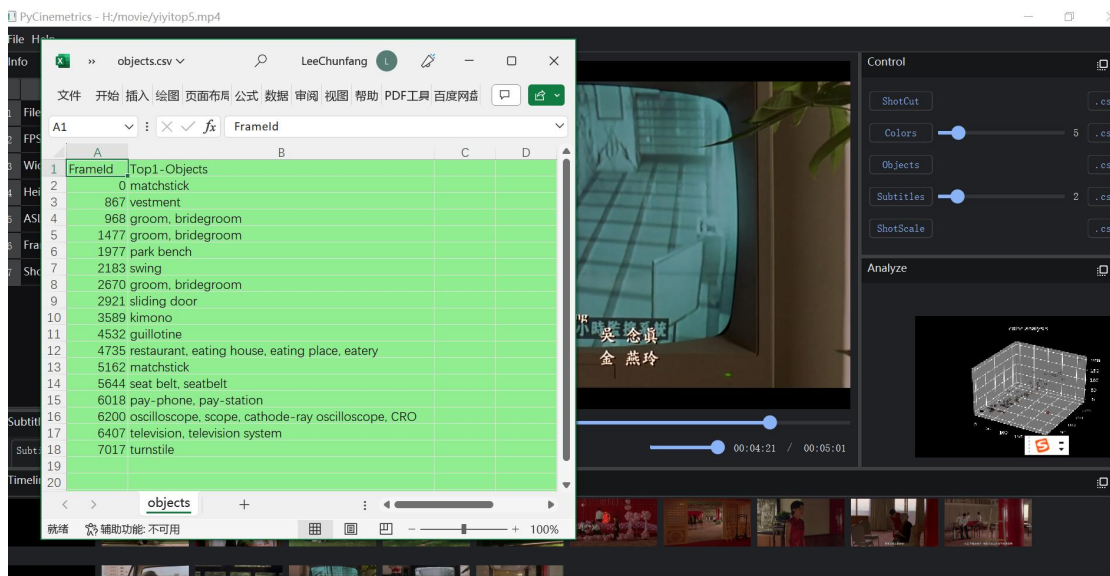
3- Color Extraction (K-Means, After 1&2)

Click the button [Colors], a K-means cluster algorithm is called to extract colors(default 5 kinds of colors) from each shot-frame. Colors data will be stored in a .csv file.



4- Object Detection (VGG19, After 1&2)

Click the button [Objects], a VGG19 algorithm is called to extract objects(Top1) from each shot-frame. Objects data will be stored in a .csv file.



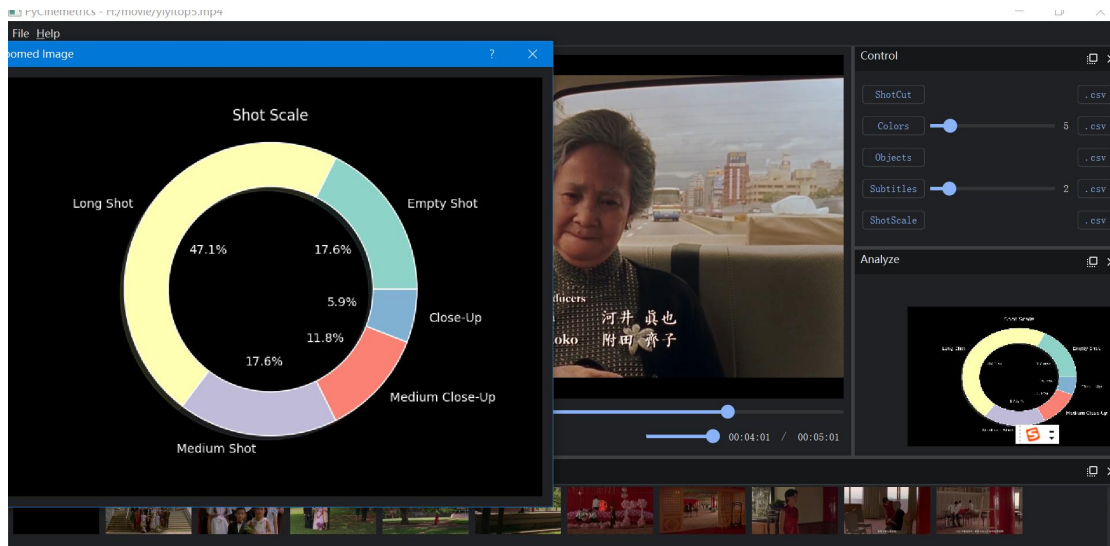
5- Subtitle Detection (EasyOCR, After 1&2)

Click the button [Subtitles], a EasyOcr algorithm is called to extract subtitles(default interval 48 frames) from each shot-frame. Subtitles data will be stored in a .csv file and .srt file.



6- Shot Scale Determination (OpenPose, After1)

Click the button [ShotScale], a OpenPose algorithm is called to extract pose keypoints from each shot-frame. ShotScale data will be stored in a .csv file.



7- Output of PyCinemetrics .csv .srt .png

When a film is analyzed with PyCinemetrics, a folder and a group of files such as .png, .csv, and .srt has been created.

.) > PyCinemetrics20230913 > img > yiyitop5 >

名称	修改日期	类型	大小
frame	2023/10/1 1:07	文件夹	
colors.csv	2023/10/1 11:28	XLS 工作表	1 KB
colors.png	2023/10/1 11:28	PNG 图片文件	71 KB
objects.csv	2023/10/1 11:34	XLS 工作表	1 KB
shotcut.csv	2023/10/1 1:07	XLS 工作表	0 KB
shotlen.csv	2023/10/1 1:07	XLS 工作表	1 KB
shotlen.png	2023/10/1 1:07	PNG 图片文件	12 KB
shotscale.csv	2023/10/1 11:37	XLS 工作表	1 KB
shotscale.png	2023/10/1 11:37	PNG 图片文件	43 KB
subtitle.csv	2023/10/1 12:55	XLS 工作表	3 KB
subtitle.srt	2023/10/1 12:55	字幕文件(.srt)	3 KB

PyCinemetrics20230913 > img >

<input type="checkbox"/> 名称	修改日期	类型
<input type="checkbox"/> ABrighterSummerDay	2023/9/26 16:05	文件夹
<input type="checkbox"/> CitizenKane	2023/9/8 11:02	文件夹
<input type="checkbox"/> demo0	2023/8/31 19:27	文件夹
<input type="checkbox"/> flowerSH	2023/9/5 1:25	文件夹
<input type="checkbox"/> GLJ_YDC	2023/8/31 21:39	文件夹
<input type="checkbox"/> huayang	2023/9/9 23:21	文件夹
<input type="checkbox"/> inourtimes	2023/9/26 12:31	文件夹
<input type="checkbox"/> luoman	2023/9/6 3:44	文件夹
<input type="checkbox"/> shennv	2023/8/31 22:26	文件夹
<input type="checkbox"/> stilllive	2023/9/26 12:26	文件夹
<input type="checkbox"/> threetimes	2023/9/24 13:48	文件夹
<input type="checkbox"/> wolfwar2	2023/9/12 20:16	文件夹
<input type="checkbox"/> wujiandao	2023/9/5 18:50	文件夹
<input type="checkbox"/> xiaochengzhichun	2023/9/2 17:15	文件夹
<input type="checkbox"/> yiji	2023/9/2 14:40	文件夹
<input type="checkbox"/> yiyi	2023/9/24 15:41	文件夹
<input type="checkbox"/> yiyihappy	2023/9/13 9:34	文件夹
<input checked="" type="checkbox"/> yiyitop5	2023/10/1 13:07	文件夹

Run from source code.

1-python 3.8

2-pip install

OpenCV-Python, Numpy, Matplotlib, Pillow,

Wordcloud, Jieba, VGG19, EasyOcr(PyTorch), TransNetV2(TensorFlow),

OpenPose, and PySide2.

3-run main.py

Thanks for your attention and suggestion.

2023.10.01