

HOME PLOTS APPS

/ home alexander github MGT-matlab

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MGT_MANUAL.pdf	●
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Command Window

```
>> help mgmotion
mgmotion - Calculate various motion features from a video file
mgmotion computes a motion video, motiongram, quantity of motion, centroid of motion, width of motion, and height of motion from the video file or musical gestures data structure. The default method is to use plain frame differencing ('Diff'). A more expensive optical flow field can be calculated with the 'OpticalFlow' method. The mgmotion function also provides a color mode, and the possibility to invert images with white on black instead of black on white.

syntax:
mg = mgmotion(mg,method,starttime,endtime,filtertype,thresh)
mg = mgmotion(filename);
mg = mgmotion(mg,'Diff');
mg = mgmotion(filename,'Diff',starttime,endtime,'Regular',0.3);
mg = mgmotion(filename,'OpticalFlow',starttime,'Binary',0.2);
mg = mgmotion(mg, ..., 'Diff',starttime,endtime, ..., ...);
mg = mgmotion(mg, ..., 'Regular', 0.3, ...);
mg = mgmotion(mg, ..., 'Binary', 0.2, ...);
mg = mgmotion(mg, ..., 'OpticalFlow', ...);
mg = mgmotion(mg, ..., 'color', ...);
mg = mgmotion(mg, ..., 'invert', ...);
mg = mgmotion(mg, ..., 'interval', 10, ...);

input:
filename: the name of the video file
mg: instead of filename it is possible to use a MG data structure
Diff: method calculates the absolute frame difference between two successive frames.
OpticalFlow: calculates the optical flow field
filtertype: Binary, Regular, Blob. When choosing Blob, the element structure needs to be constructed using function strel
thresh: threshold [0,1] (default=0.1)
color: does the analysis with 4 planes (default: grayscale)
invert: creates motiongrams with white background (default: black)
interval: skip frames for more rapid processing

output:
mg, a musical gestures data structure containing the computed motion image, motiongram, qom, com
```

Workspace

Name	Value
ans	'/home/alexander'

Details

fx >>

