

color scene

film Δcolor visualization tool

created by yuliya smilyanski



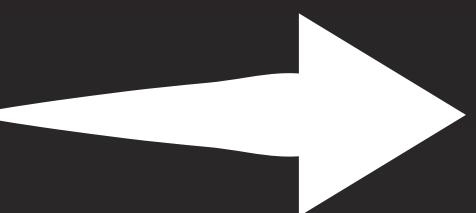
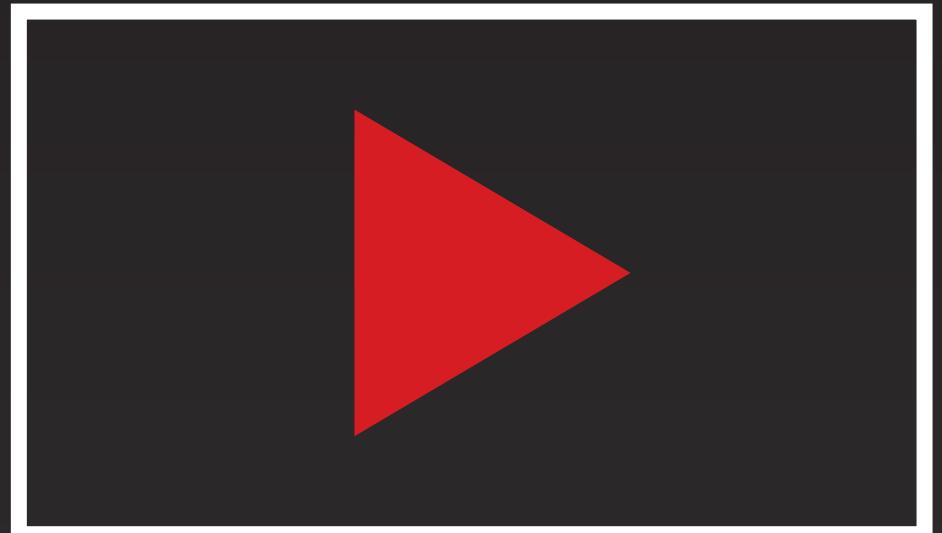
context + hypothesis

inspiration – movie “barcode”
difficulty in visualizing color
themes of movies

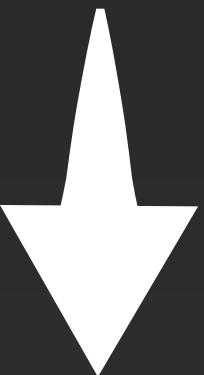
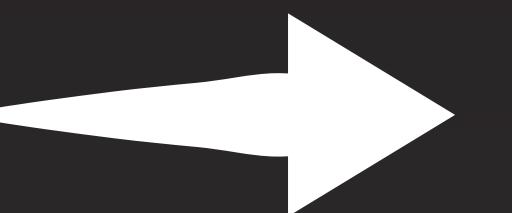
tracking prevalent colors in 2d media
to
tracking changes in colors of
time-based media

hypothesis: choosing colors to track + tracking those using an algorithm can give enough color data to accurately visualize the change of color throughout 2d time-based media

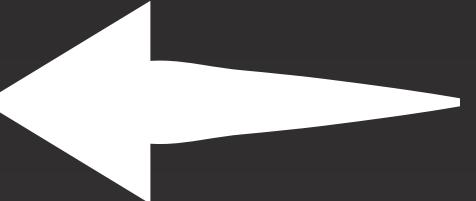
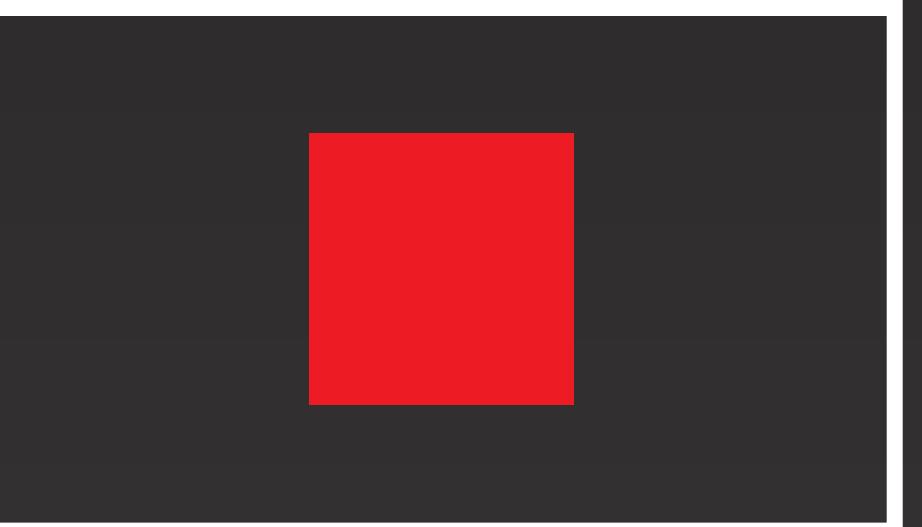
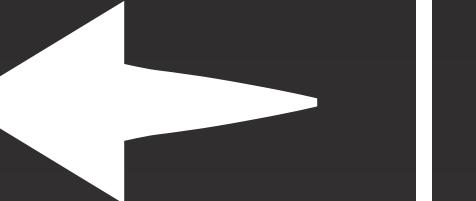
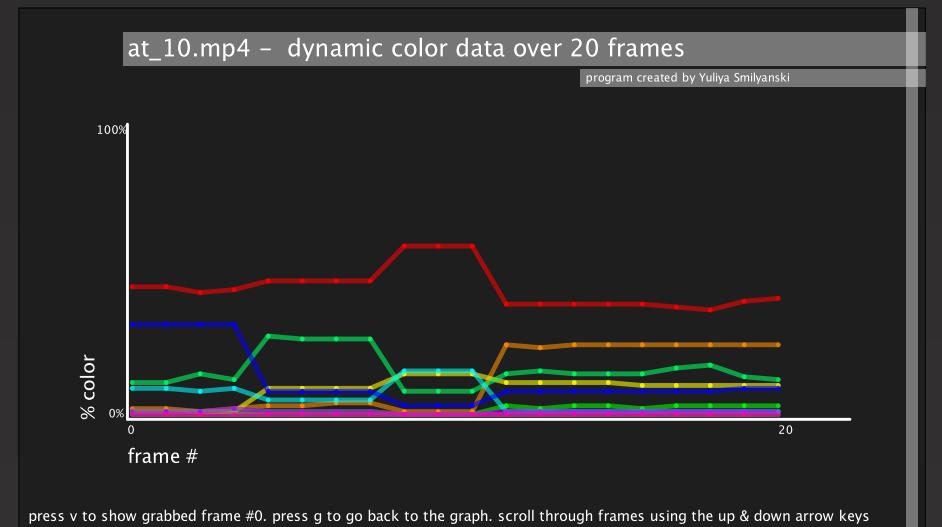
sampling process



jump to a
frame



store color
data for that
frame



white

black

gray

red

orange

yellow

lime green

blue green

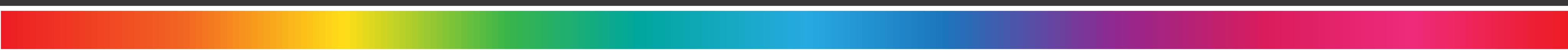
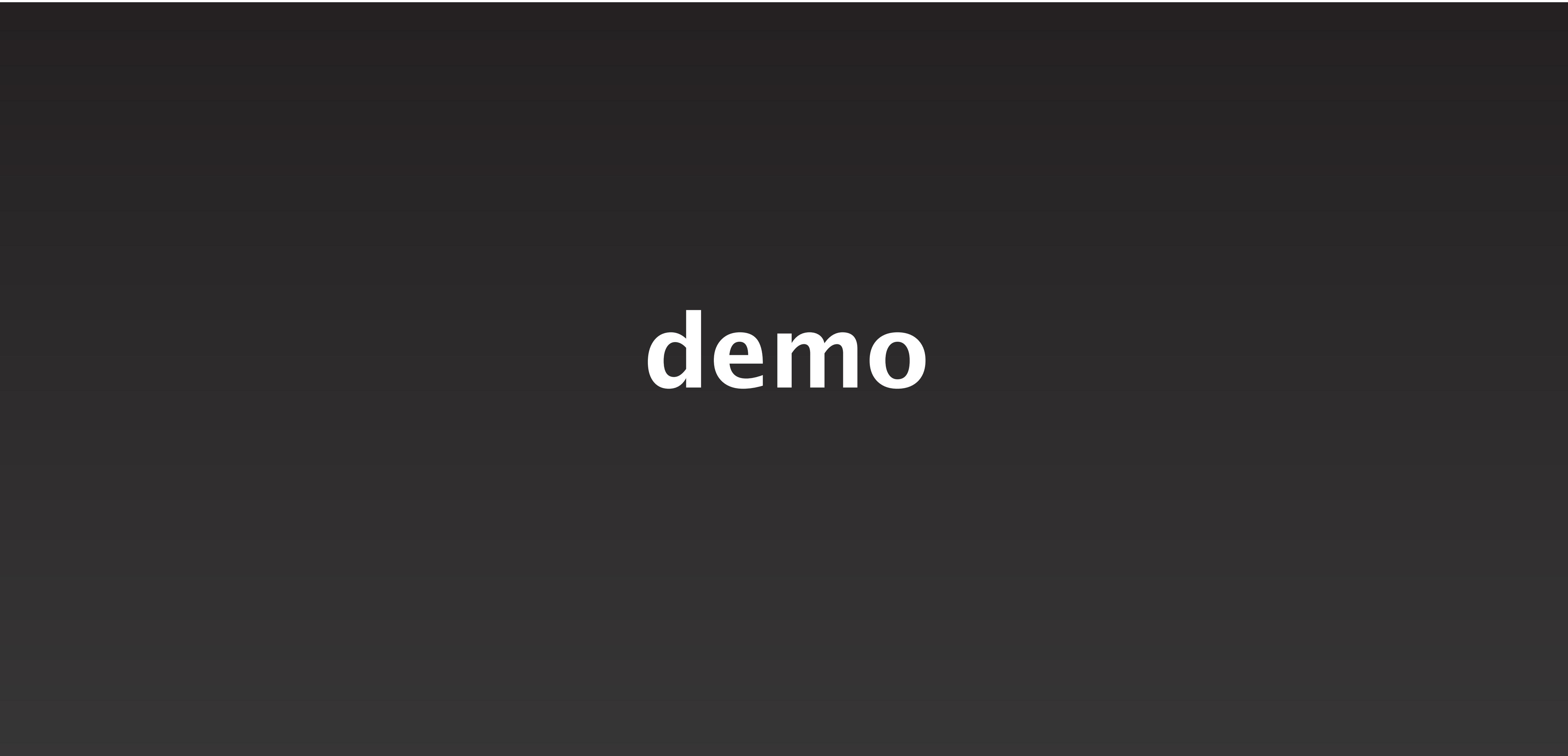
light blue

blue

purple

pink

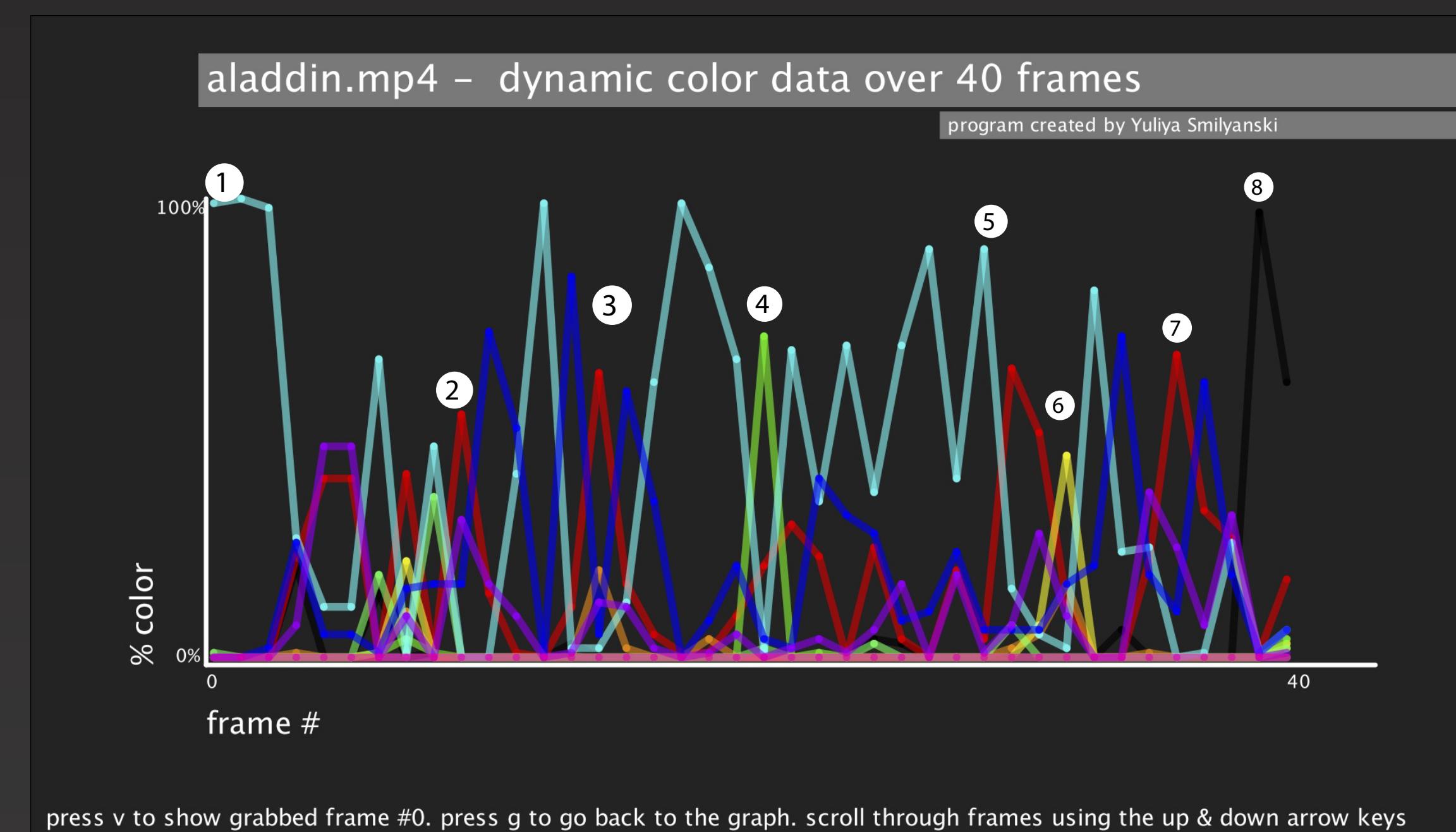
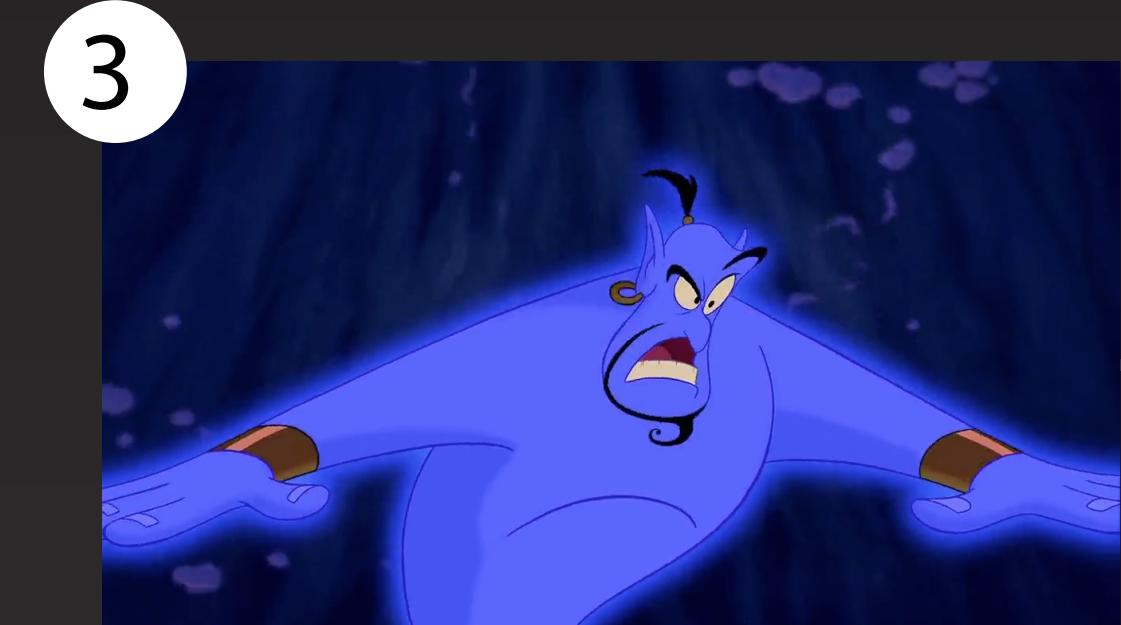
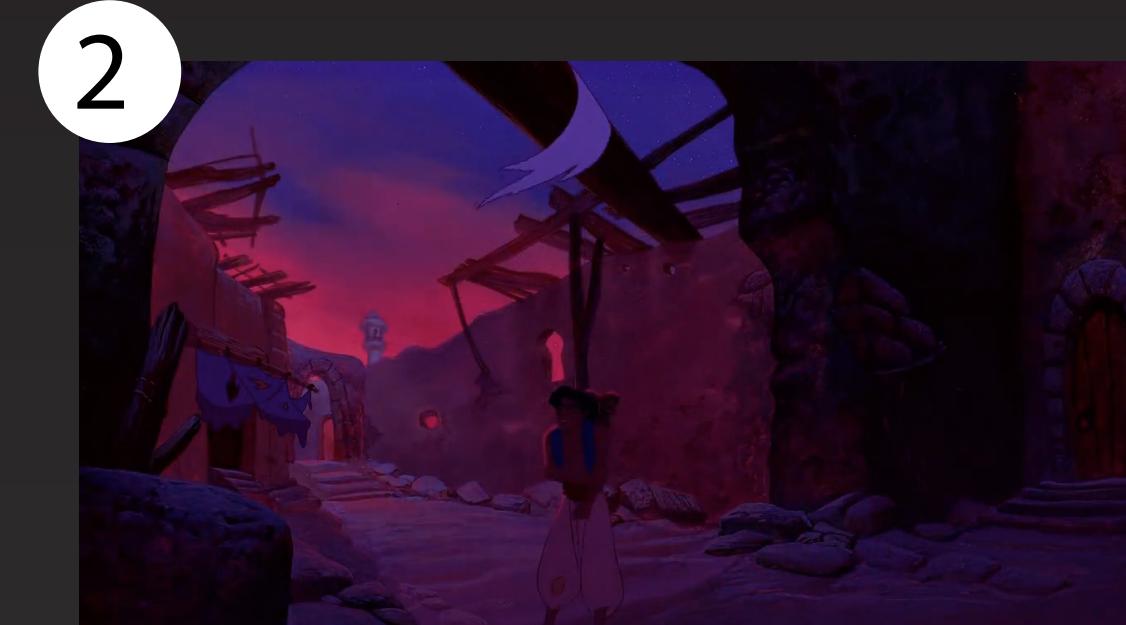
red



demo



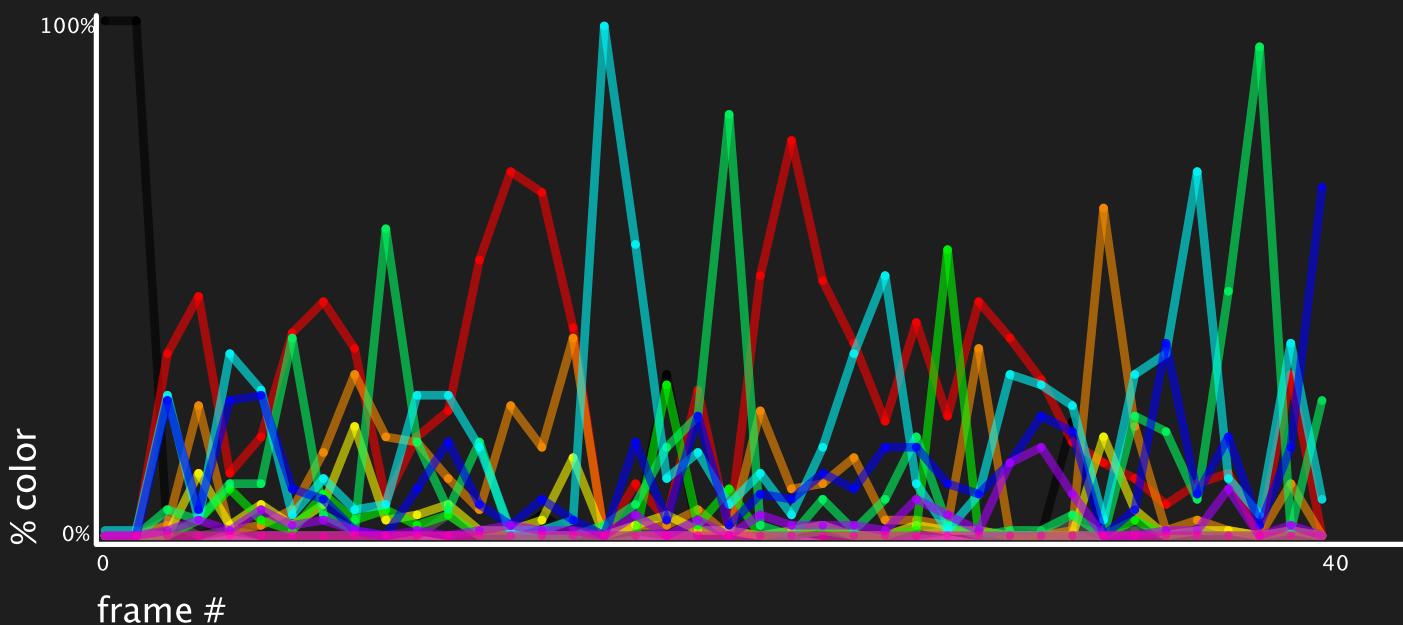
example - aladdin



more examples

jaws.mp4 – dynamic color data over 40 frames

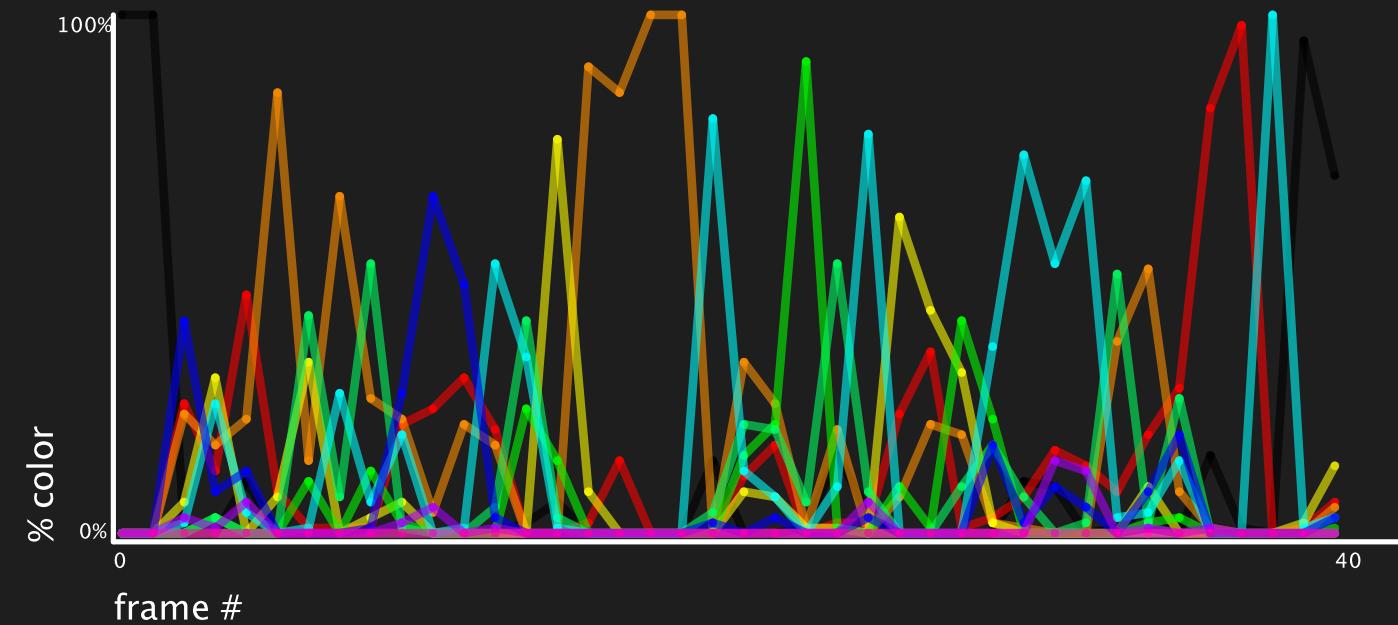
program created by Yuliya Smilyanski



press v to show grabbed frame #0. press g to go back to the graph. scroll through frames using the up & down arrow keys

tlk.mp4 – dynamic color data over 40 frames

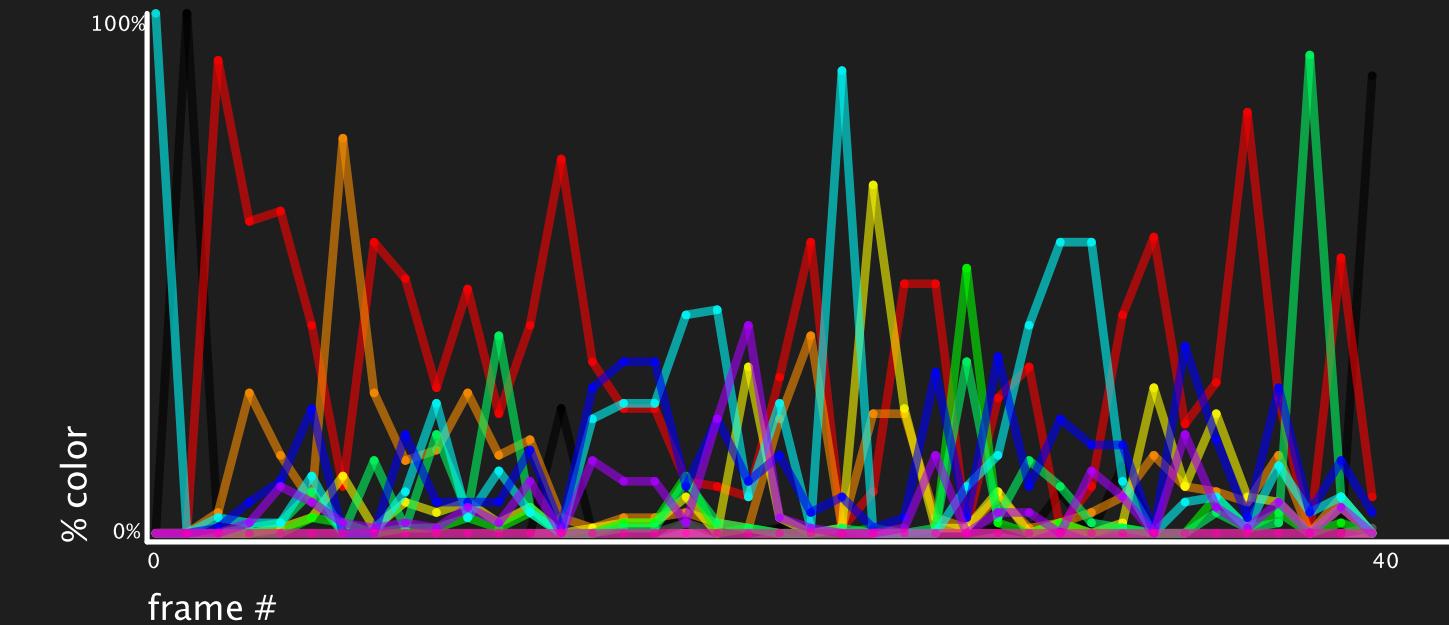
program created by Yuliya Smilyanski



press v to show grabbed frame #0. press g to go back to the graph. scroll through frames using the up & down arrow keys

toyStory.mp4 – dynamic color data over 40 frames

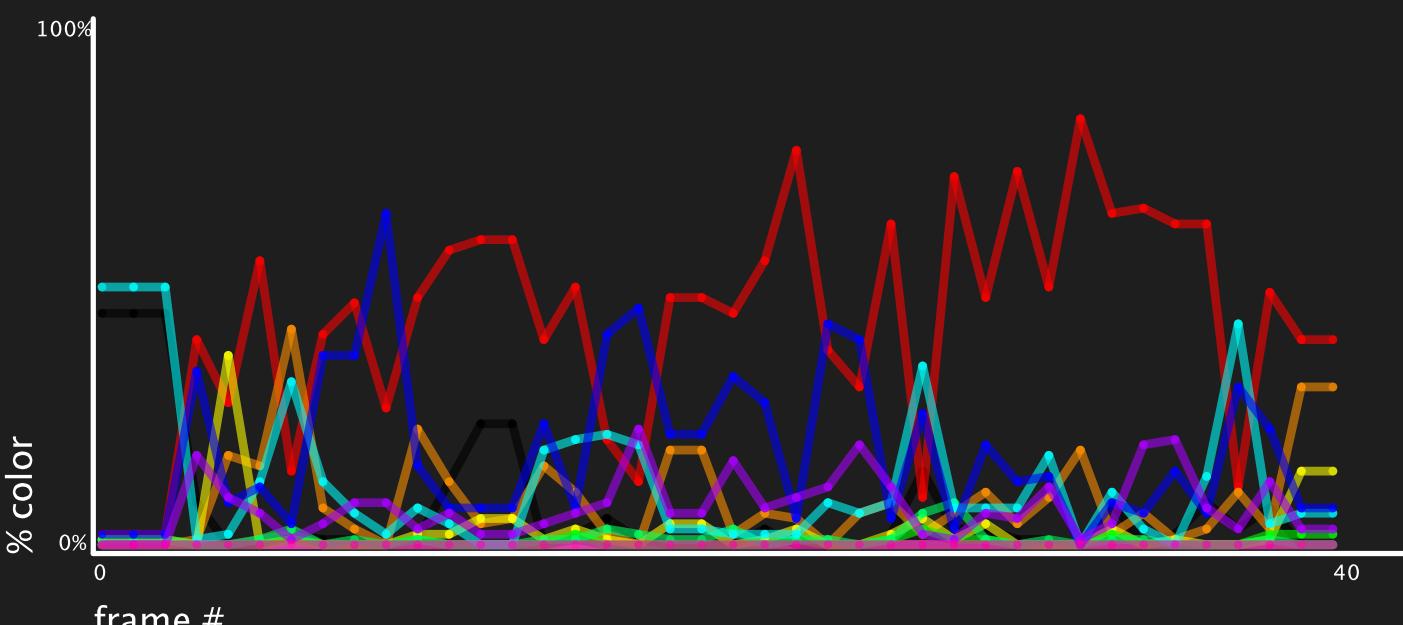
program created by Yuliya Smilyanski



press v to show grabbed frame #0. press g to go back to the graph. scroll through frames using the up & down arrow keys

meanGirls.mp4 – dynamic color data over 40 frames

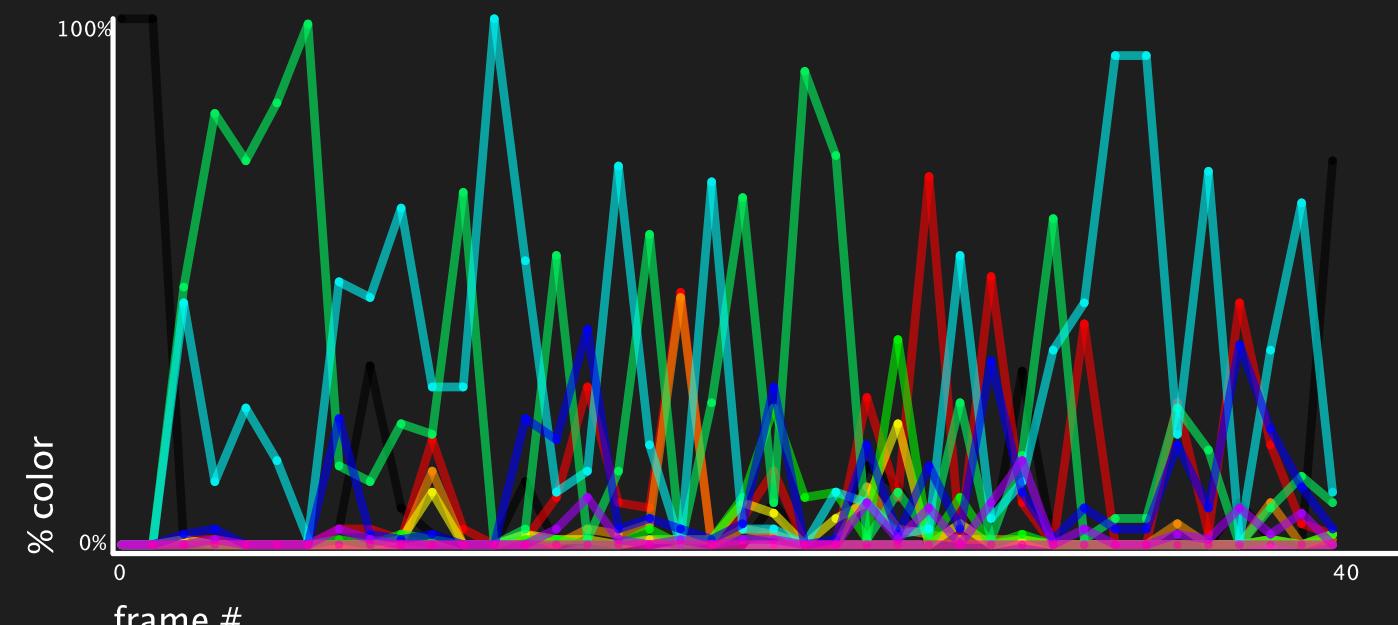
program created by Yuliya Smilyanski



press v to show grabbed frame #0. press g to go back to the graph. scroll through frames using the up & down arrow keys

swesb.mp4 – dynamic color data over 40 frames

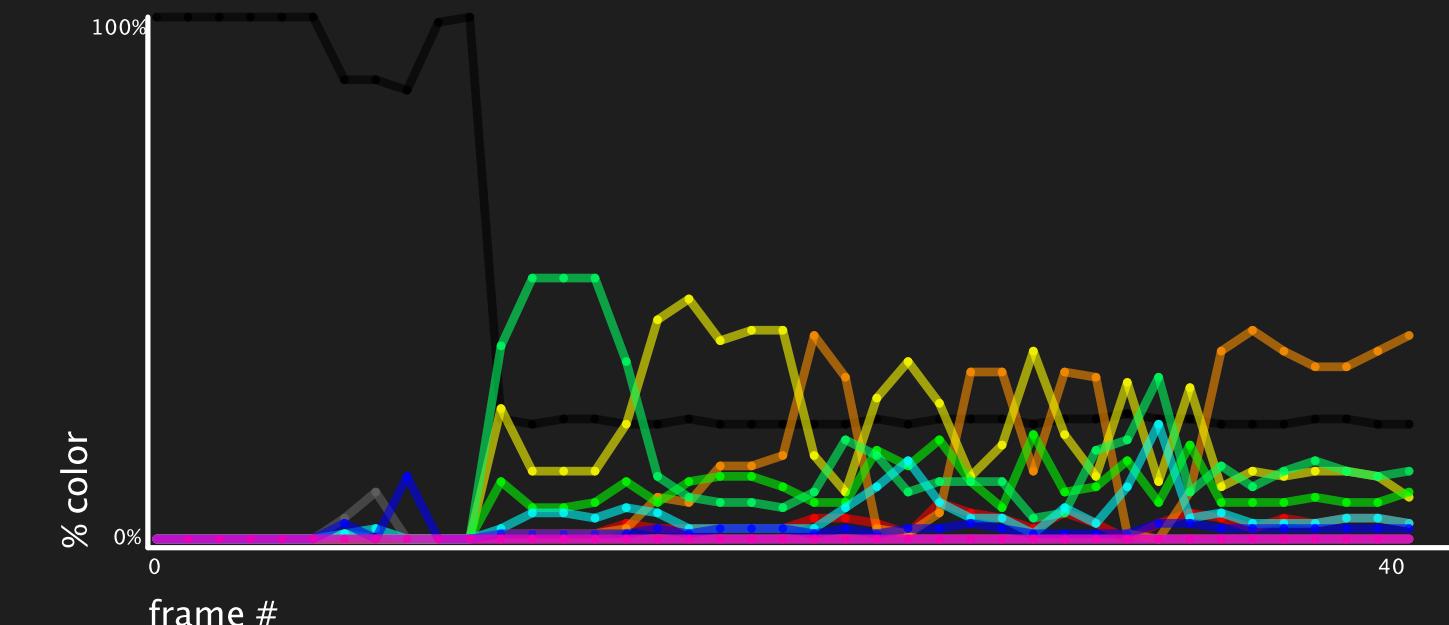
program created by Yuliya Smilyanski



press v to show grabbed frame #0. press g to go back to the graph. scroll through frames using the up & down arrow keys

moonlight.mp4 – dynamic color data over 40 frames

program created by Yuliya Smilyanski



press v to show grabbed frame #0. press g to go back to the graph. scroll through frames using the up & down arrow keys

self-eval

long journey through this project
direction change was ultimately necessary
color ranges are not the best for identification

lots of overlap
needs to be easier to confirm results of a frame with the graph
takes too much RAM
bugs

pink doesn't seem to ever get populated
frame grab is laggy

future development

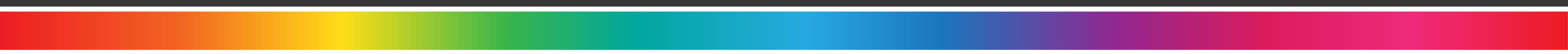
more elaborate UI

- show graph being populated as program runs

- color identification to incorporate more saturation and brightness

- ability to compare multiple movies within UI

- sample more frames



questions?