

# Assignment 1

Assoc. Prof. Dr. Klaus Schöffmann

SS 2021

# Shot Detection

- As a crucial part of your video search system you will need to segment a video into shots first
- Hence, implement a shot boundary detection method with OpenCV, which
  - inspects every frame of a video and extracts a 64-bin color histogram
  - compares the color histograms of subsequent frames with the twin-comparison algorithm
  - detects a shot change if the computed difference between subsequent frames is large enough (e.g., use manhattan distance)
  - outputs the shots as a list of frame segments
    - e.g., 1-76 (Shot 1), 77-148 (Shot 2)
    - the format you use here is up to you
  - extracts and saves a keyframes for every shot
    - use the middle keyframe of every shot

# Deadline for Assignment 1

- The solution to this assignment is due on April 12, 2021
- Please upload:
  - source code of your project
  - results for the video "everest.mp4"