

VIDEO INDEXING

STEP 3: SEGMENTATION





Purpose of Segmentation



Divide the video into manageable parts (shots, scenes, chapters).

Helps us organize content and attach metadata (e.g., "scene 1: Howl rescues Sophie").

Essential for indexing, so users can jump to important parts easily.



Techniques Used



HISTOGRAM COMPARISON



TOOL

Bhattacharyya Distance



HOW

Each frame is converted to HSV (Hue, Saturation, Value).

A histogram is generated and compared to the previous frame.

A large difference means a scene change (a cut).





Techniques Used



THRESHOLDING



HOW

If the histogram difference $> 0.3 \rightarrow$ scene boundary is detected.





Techniques Used



VIDEO WRITING



HOW

**The video is split into smaller segments
and saved in segments/ folder.**



