



Content Type Indicator For Technologies Supporting Video Sequence Summarisation

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Video Quality Experts Group (VQEG) Meeting, 10.06.2021

“Technologies Supporting the Summarization of Video Sequences”

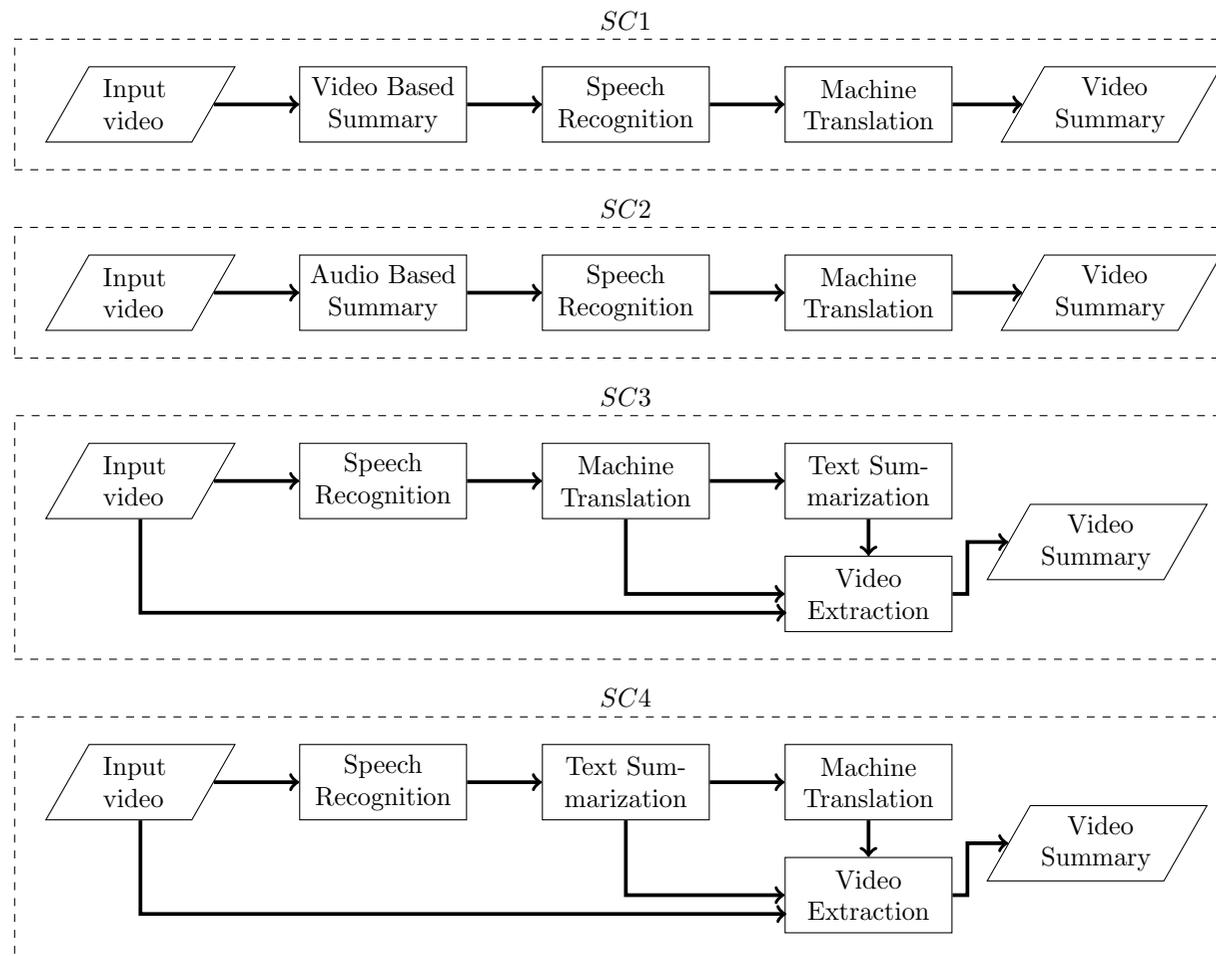


- » Continuation of the previous project focused on summarizing news
- » The purpose of R&D works: to create/develop technologies (algorithms and their implementation) supporting the creation of video sequence summarization systems
- » Project start date: 2021-03-01
- » Project financed by the National Centre for Research and Development under the TANGO programme

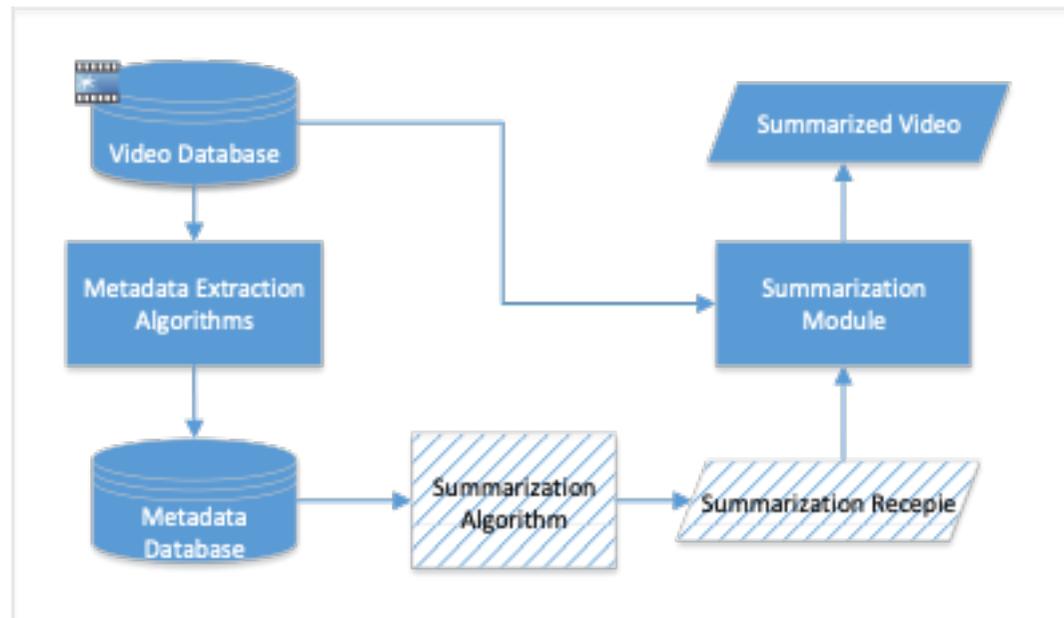


The National Centre
for Research and Development

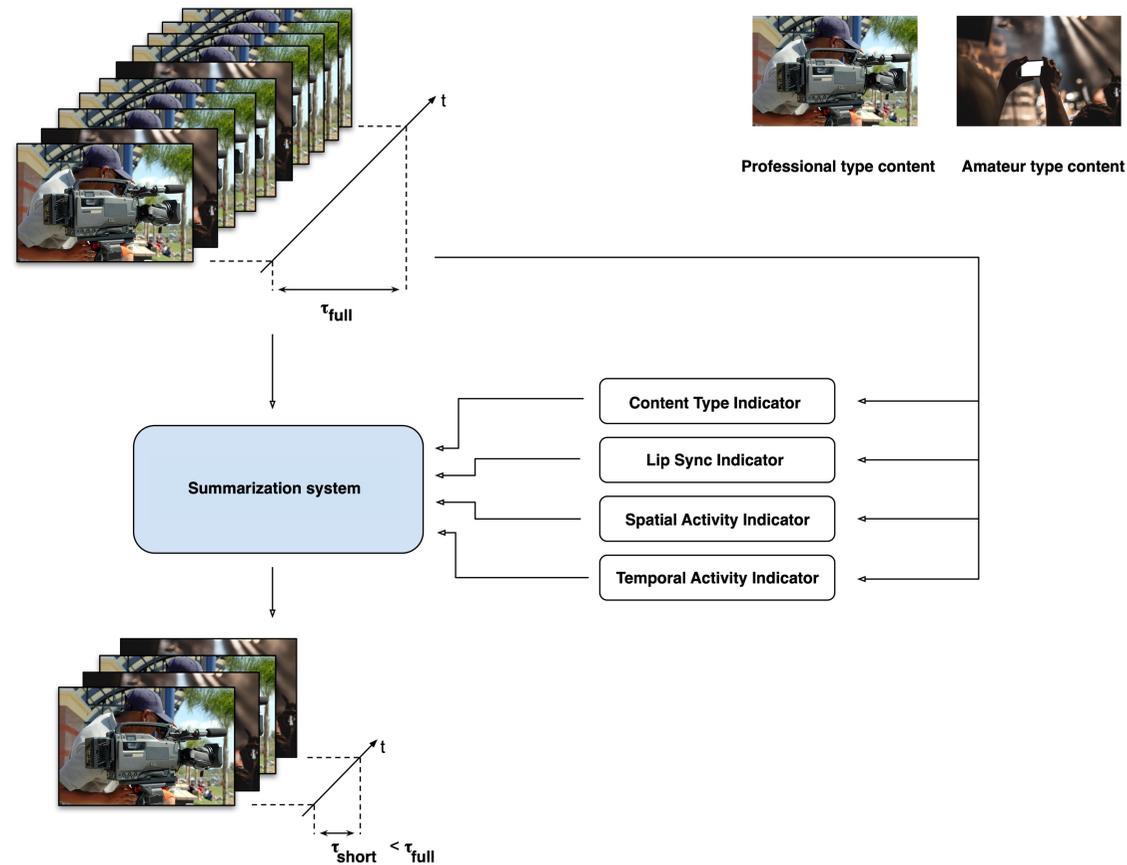
Different Architectures for Summarizing Video Sequences in the Target Language



Workflow in Software That Summarizes Video Sequences



Principle of Operation of the Proposed Summarising System



Content Type (Formerly)



Professionally-
Generated Content
(PGC)



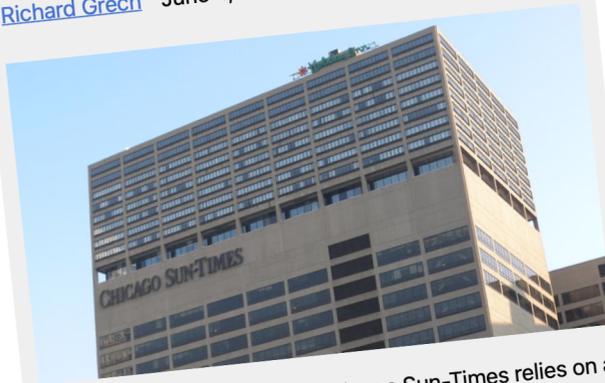
User-Generated
Content (UGC)



Professional Camera in Your Pocket

Could iPhones replace news photographers? The Chicago Sun-Times thinks so

[Richard Grech](#) June 4, 2013



Like many newspapers, the Chicago Sun-Times relies on a staff of photographers to provide images for its stories. But last week the paper did something unimaginable: it laid off its entire staff of 28 full-time photographers. While it's no secret newspapers across the country are struggling to make ends meet, the move by Sun-Times goes beyond just budget cuts. Citing a need for more video content, the Sun-Times will utilize freelance photographers and require its reporters to shoot photos

Swiss TV Station Replaces Cameras with iPhones and Selfie Sticks

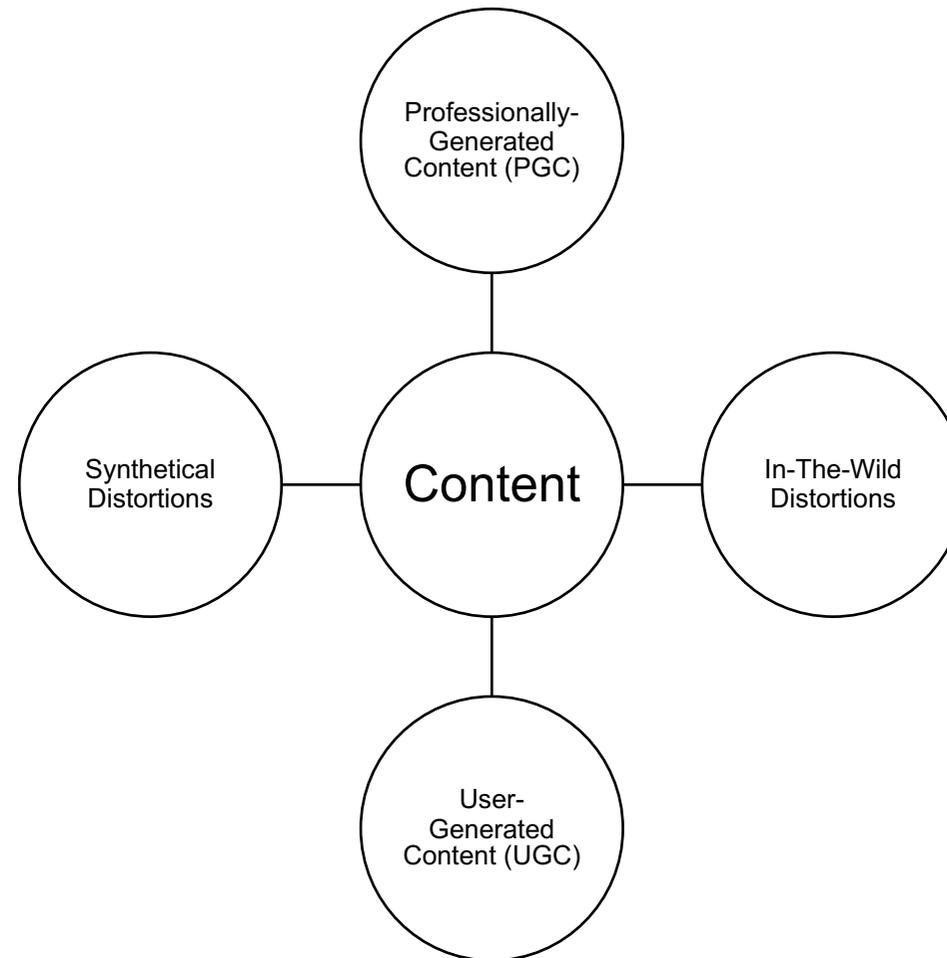
Sep 29, 2015



iPhones may not be very good at [photographing lunar eclipses](#), but apparently they're just fine for television news broadcasts. A local TV news station in Switzerland has ditched standard TV cameras to go 100% iPhone.

Swiss newspaper [Le Temps reports](#) that the TV station Léman Bleu made the major switch this past summer when it outfitted each reporter on the field with an iPhone 6 kit for shooting pre-recorded stories and for shooting

Content Type (Currently)



Characteristics of In-The-Wild Content

- » Not professionally curated
- » Captured and processed by amateurs
- » Unstable camera motion
- » Captured with hand-held device
- » May contain other annoying distortions due to:
 - Out of focus,
 - Object motion, or
 - Under-/overexposure

Research on In-The-Wild Content

- » Quite a lot of research available on the quality of in-the-wild content
- » But relatively little research available on recognizing in-the-wild content
- » Happily, at least available (3+) publicly available in-the-wild video databases:
 - KoNViD-1k
 - CVD2014, and
 - LIVE-Qualcomm

Current State of the Research

- » Literature research
- » Collected in-the-wild content (KoNViD-1k, CVD2014, and LIVE-Qualcomm)
- » Collected non-in-the-wild content (NTIA simulated news, and 6K+ YT news clips)

Next Steps in the Research

- » Development of a sub-sampling algorithm for a non-in-the-wild set
- » Beginning the actual modelling of the in-the-wild content discriminant indicator, based on:
 - » Existing AGH Quality Indicators (<https://goe.agh.edu.pl/indicators/>) upgraded to 4K, 60 fps, and HDR
 - » New Quality Indicators
- » All your references, ideas, discussion are welcome!

Thank You for Your Attention!



The image contains two main visual elements. On the left is the QOE logo, which consists of a colorful geometric pattern of triangles in shades of blue, green, yellow, orange, red, and purple. Overlaid on this pattern are the letters 'QOE' in a white, stylized font. On the right is a photograph of a colorful lizard, possibly a spiny-tailed lizard, with a body covered in small, raised scales in various colors including green, red, and yellow. The lizard is perched on a piece of weathered, light-brown wood.

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