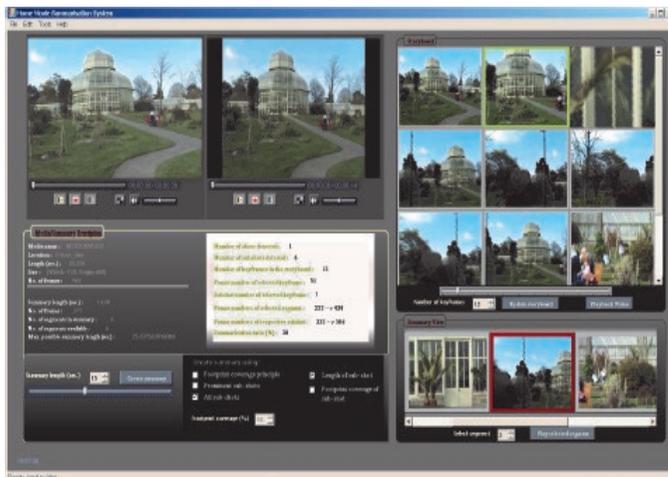


## Summarising unstructured consumer video footage



The proliferation of consumer camcorders and video recording technology in digital cameras and smartphones has greatly accelerated the casual capture of video content. Consumers however, face the challenge of converting large amounts of unstructured video footage into abridged

content which gives a better viewing experience.

The system we have developed solves the problem of condensing user-generated videos into meaningful highlights of a user-defined duration.

One shortcoming of existing off-camera video editing tools is that there is often no facility to allow for user interaction in creating the summary. This is an area where the fully automatic approach falls down.

Our approach permits subjectivity in the composition of the final video summary. In addition, we have developed an intuitive user interface design to keep the required user effort to a minimum when composing the video summary.

## Benefits

- Compact summaries of video content
- Better viewing experience
- Summary personalisation through intuitive user input
- Summary duration is user defined
- Intelligent summarisation engine to support multiple summaries for a given video
- Requires less user input than other methods

## Applications

- Summarising consumer videos captured with camcorders, smartphones and cameras
- Summarising long-sequence video content from wearable capture devices

<http://www.clarity-centre.org>

## Potential applications

The target application area for this novel technology is in the off-camcorder summarising of consumer video content.

We also see opportunities to extend the technology into the casual video capture market with the proliferation of video capability in other consumer electronic devices.

## Benefits

In our framework, we have addressed the problem of subjectivity of video summarisation, by allowing the user to interactively create video summaries of a user-defined target duration.

We have developed novel content analysis techniques that enable the creation of video summaries efficiently and effectively.

A more fine-grained user control of the summarisation process is also possible if the user wishes to refine the summarisation results.

Combining intuitive user interface design features together with automatic content analysis techniques guarantees the subjectively best summarisation in a simple and efficient manner.

## Technology status

- Image processing, segmentation and summarisation algorithms are all complete and working
- User interface and interaction workflow are complete and working

The research group is keen to engage with companies interested in further developing the technology

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