

CLAIMS

1. A computer-implemented method for detecting a scene transition in video footage, the method comprising:
for each of a plurality of different frames of video footage, obtaining a value of a confidence measure associated with a detected object in the frame; and
detecting a scene transition in the video footage based on the obtained values of the confidence measure.
2. The method of claim 1, wherein detecting a scene transition based on the obtained values of the confidence measure comprises:
analyzing the obtained values of the confidence measure to identify a trend or pattern in the values of the confidence measure over the plurality of the different frames of video footage; and
identifying the scene transition in the video footage based on the identified trend or pattern in the values of confidence.
3. The method of claim 2, wherein identifying a scene transition comprises:
comparing the identified trend or pattern in the values of confidence with a predetermined trend or pattern;
and
identifying the scene transition in the video footage based on the comparison result.
4. The method of either of claims 2 or 3, further comprising:
classifying the identified scene transition based on the identified trend or pattern in the values of confidence.
5. The method of any of the preceding claims, wherein detecting a scene transition based on the obtained values of the confidence measure comprises:
responsive to the obtained values of the confidence measure decreasing over successive frames of the video footage, determining the presence of a scene transition in the video footage.
6. The method of any of claims 1 to 4, wherein detecting a scene transition based on the obtained values of the confidence measure comprises:
responsive to the obtained values of the confidence measure increasing over successive frames of the video footage, determining the presence of a scene transition in the video footage.
7. The method of any of the preceding claims, further comprising:
comparing the obtained values of the confidence measure with a threshold value; and
identifying at least one of a start and an end of the scene transition based on the comparison result.

8. The method of claim 7, wherein identifying an end of the scene transition comprises:
determining frames of the video footage for which the obtained values of the confidence measure decrease from a value exceeding the threshold value to a value not exceeding the threshold value; and
determining the end of the scene transition based on the determined frames.
9. The method of claim 7, wherein identifying a start of the scene transition comprises:
determining frames of the video footage for which the obtained values of the confidence measure increase from a value not exceeding the threshold value to a value exceeding the threshold value; and
determining the start of the scene transition based on the determined frames.
10. The method of any of the preceding claims, wherein obtaining values of a confidence measure comprises:
obtaining a first value of the confidence measure associated with the detected object in a first frame of the video footage; and
obtaining a second value of the confidence measure associated with the detected object in a second, subsequent frame of the video footage.
11. The method of claim 10, wherein the first and second frames of the video footage are sequential frames of the video footage.
12. A computer program product for detecting a scene transition in video footage, the computer program product comprising:
a computer readable storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for performing a method according to any of claims 1 to 11.
13. A computer program stored on a computer readable medium and loadable into the internal memory of a digital computer, comprising software code portions, when said program is run on a computer, for performing the method of any of claims 1 to 11.
14. A system for detecting a scene transition in video footage, the system comprising one or more processors and one or more tangible storage media storing programming instructions for execution by the one or more processors, the programming instructions comprising instructions for:
obtaining via an interface, for each of a plurality of different frames of video footage, a value of a confidence measure associated with a detected object in the frame; and
detecting a scene transition in the video footage based on the obtained values of the confidence measure.
15. The system of claim 14, wherein the instructions to detect comprise instructions for:

analyzing the obtained values of the confidence measure to identify a trend or pattern in the values of the confidence measure over the plurality of the different frames of video footage; and

identifying a scene transition in the video footage based on the identified trend or pattern in the values of confidence.

16. The system of either of claims 14 or 15, wherein the detecting comprises:
responsive to the obtained values of the confidence measure decreasing over successive frames of the video footage, determine the presence of the scene transition in the video footage.
17. The system of either of claims 14 or 15, wherein the detecting comprises:
responsive to the obtained values of the confidence measure increasing over successive frames of the video footage, determine the presence of the scene transition in the video footage.
18. The system of any of claims 14 to 17, wherein the detecting comprises:
comparing the obtained values of the confidence measure with a threshold value; and
identifying at least one of a start and an end of the scene transition based on the comparison result.
19. The system of claim 18, wherein identifying a start of the scene transition comprises:
determining frames of the video footage for which the obtained values of the confidence measure increase from a value not exceeding the threshold value to a value exceeding the threshold value; and
determining the start of the scene transition based on the determined frames.
20. The system of any of claims 14 to 19, wherein obtaining value of a confidence measure comprises:
obtaining a first value of the confidence measure associated with the detected object in a first frame of the video footage; and
obtaining a second value of the confidence measure associated with the detected object in a second, subsequent frame of the video footage.