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Abstract

Global gestures on touch devices need to be detected so that this information can later be used to create checkpoints in a screen recording of the touch device. Currently, there is no uniform and legal solution to do so on devices like the iPad. We propose a system with two cameras (RGB cameras) which will be able to detect global gestures performed on any touch device (or in fact, any surface like a book). The system will be able to track all touch gestures performed on a surface and either associate live actions with it or store the metadata for later use. This paper primarily focuses on the heuristics applied to be able to make the system robust. It also aims to counter problems arising out of motion blur, lighting variations etc.

References

- Leap motion device: https://www. leapmotion. com/
- Microsoft Kinect device: http://www. microsoft. com/en-us/kinectforwindows/
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- The SwipePad application for android devices is able to recognize global gestures https://play. google. com/store/apps/details?id=mobi. conduction. swipepad. android&hl=en
- OpenCV, an open-source library for computer vision http://opencv. org/

Index Terms

Computer Science Pattern Recognition

Keywords

Touch gestures Touch devices heuristics and global gesture recognition.