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Thème
Hand gesture recognition

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2. Abstract:

Gesture recognition is becoming a growing field of study with too many applications such as automated sign language recognition, human-machine interaction and medical application.

In this research, we focus only on hand gesture recognition. We study and analyze the different technical approaches and algorithms used to detect and recognize the hand gesture; we compare some machine learning and deep learning algorithms on different datasets and discuss their results, merits and limitations, and explain why some of these approaches fail to give the aimed result.

Moreover, we review the different hand gestures recognition stages such as the detection phase and the tracking and the techniques used in each stage.

In addition we present the different factors that may affect the result and should be taken in consideration such as the data preparation and image preprocessing.

Through presenting the studies and the related works and their obtained result in this paper we try to figure out the suitable approaches to the hand gesture recognition projects.