

A bibliometric analysis of human action recognition

ABSTRACT

Over the past two decades, the use of computer vision methods for enabling machines to recognize human action from a sequence of images, has grown as information technologies advance, and hardware availability such as cameras (especially closed circuit television) has increased. From the latter part of the 1980s till recently, computer vision has been employed for human action recognition research. Due to the volume of existing academic studies, it would be impractical to review all researches. This paper presents a brief analysis regarding the body of knowledge in Human Activity Recognition from 1987 to 2015. Bibliometric techniques based on the Science Citation Index (SCI) databases of the Web of Science are employed where 1,172 articles are critically analysed on the various aspects of publication characteristics such as authorship, countries, institutions, number of citations, and keywords. The pace of publishing in this field has shown to increase rapidly over last 20 years. By identifying the global trends in HAR research, this study is beneficial for researchers, for example, in the selection of future research topics. Similarly, policy makers can also benefit from the findings for a better understanding of how HAR develops over time.

Keyword: Human action recognition; Bibliometric analysis; Content analysis; Literature review; Most cited; Research trends