Abstract

Human tracking is the process of locating moving objects (human) over time using camera. It has wide number of applications like security and surveillance, traffic control, video editing, medical imaging etc. It can be a time consuming process due to the large amount of data contained in video. The objective of human tracking is to associate target objects in consecutive video frames. To initiate human tracking an algorithm analyzes video frames and outputs the movement of targets between the frames. There are a number of algorithms each having its own strengths and weakness. Considering the intended use is important when choosing the algorithm. This paper proposes particle filter based methods for human tracking, addressing two major issues such as variations of distance measurement (similarity measure) and Re-Sampling algorithms.

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**Index Terms**

Computer Science

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Distance Measure  Re-Sampling  Score  Video/Image frames