Classifications of Images for the Recognition of People's Behaviors by SIFT and SVM

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Abstract : Behavior recognition has been studied for realizing drivers assisting system and automated navigation and is an important studied field in the intelligent Building. In this paper, a recognition method of behavior recognition separated from a real image was studied. Images were divided into several categories according to the actual weather, distance and angle of view etc. SIFT was firstly used to detect key points and describe them because the SIFT (Scale Invariant Feature Transform) features were invariant to image scale and rotation and were robust to changes in the viewpoint and illumination. My goal is to develop a robust and reliable system which is composed of two fixed cameras in every room of intelligent building which are connected to a computer for acquisition of video sequences, with a program using these video sequences as inputs, we use SIFT represented different images of video sequences, and SVM (support vector machine) Lights as a programming tool for classification of images in order to classify people's behaviors in the intelligent building in order to give maximum comfort with optimized energy consumption.

Keywords : video analysis, people behavior, intelligent building, classification
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