

基於動作識別為基礎之人類行為描述模型

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摘要

Based on human action recognition, this paper proposes a new description model to record human behavior. Therefore, this paper mainly researches on relevant event analysis based on action interrelation; however, research relating to event analysis still stays in preliminary stage. A complete intelligent surveillance system consists of the following parts; object detecting, object tracking, action recognition, human behavior description model and event detecting, event recording, event control processing, and event prediction. The paper intends to make use of action recognition result and regard time information accumulated in action recognition as features, record human actions and time spent in these actions, then identify events through action combination and give effective processing toward these identified events. In order to prove feasibility of human behavior description model, we take events produced when pedestrians pass through cross-road as example. Under cross-road context in the experiment, total 60 films are shot when five pedestrians are passing through cross-road, producing 191 events. 187 events are correctly detected in the experiment with correct rate of 98% and error rate of 2%. On human behavior analysis, the well-defined events are able to be correctly and steadily identified and given with proper processing and control.

關鍵字：Behavior Identification, Human behavior analysis, Human event