ABSTRACT

In this dissertation a system that allows tracking of moving objects in cluttered scenes in presence of occlusions is presented.

The developed algorithm integrates information on shapes, color and movement of the objects detected by the system; this information is used to track merged objects during an occlusion on the image plane.

The proposed method wants to realize a more robust system in respect of that presented in literature, by improving a method based on the shape modelling: a set of characteristic points is selected and it is completed by information on its color.

Moreover, for non-rigid objects, characterized by periodic movement and classified by the system as persons, periodic information regarding movement is taken into account and combined with color information.