

Location, tracking and identification with RFID and vision data fusion

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Abstract

Nowadays using the GPS locating technologies it is possible to solve most of situations where location and tracking of people and objects are necessary in open spaces. Besides that, with wireless networks is possible to communicate location information to a central control point. However when it has to be done in an indoor environment, where GPS signal can not be used and multiple people and objects are moving in the area, there are not a good solutions to cover the locating, tracking and identity of each element without confusion. We will present a complete solution which combines RFID identification ability with a complex machine vision tracking using multiples IP cameras, to improve the strength of both technologies, allowing the identification, location and tracking of humans and vehicles in a wide area.