

Abstract

A Crowd Counting System and a Method of Operating a Crowd Counting System

An aspect of the present disclosure provides a crowd counting system. The system includes at least one processor, and at least one memory including computer program code. The at least one processor, at least one memory and the computer program code are configured to allow the system to receive an image depicting a crowd, determine if a crowd density variation exists within the image based on a predetermined threshold for crowd density variation, partition the image into a plurality of image segments based on predefined crowd density ranges in response to a positive determination of the crowd density variation, each image segment corresponding to a predefined crowd density range, determine a crowd size within each image segment using a crowd counting algorithm associated with crowd density range of the image segment, wherein each predefined crowd density range is associated with a respective crowd counting algorithm, and determine the crowd size in the image by summing the crowd size in each of the plurality of image segments.

Fig. 2