Abstract

Drivers often encounter problems associated with locating empty parking slots in parking areas. This paper presents a smart parking lot management system which operates using image processing. An image processing algorithm is used to detect empty parking areas from aerial images of the parking space. The algorithm processes the image, extracts occupancy information concerning spots, and their positions thereof. The system also reports if individual parking spots are occupied or otherwise. Occupancy information is made available to newly arriving drivers by projecting it unto large displays positioned at vantage points near the vicinity. The smart parking lot management system reduces the stress and time wastage associated with car parking and makes management of such areas less costly.

References

A Smart Image Processing-based System for Parking Space Vacancy Management


Index Terms

Computer Science

Image Processing
Keywords

Edge Detection, Morphological Dilation, WiFi, ROI, FOV