SmartPark – Intelligent Parking System using Drones

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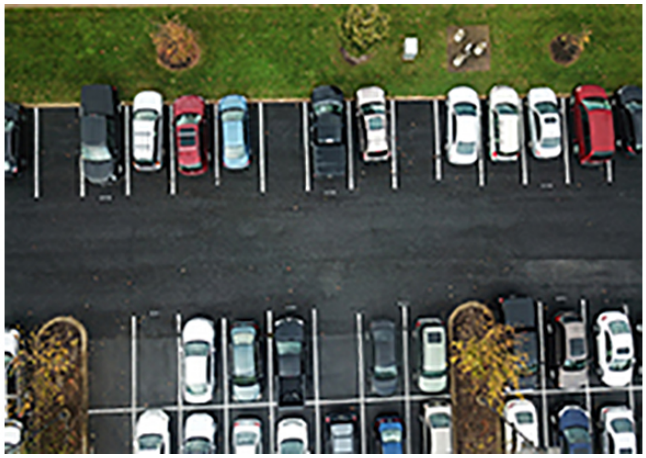

Drone view of outdoor parking lot spaces

Technology Summary

Finding an empty parking spot in an outdoor parking lot has become a daily concern for many vehicle drivers. This problem also led to drivers prolonging their driving time to find vacant parking spots leading to non-environmentally friendly atmosphere with increased carbon emissions. From an organizational perspective, there are difficulties finding parking violators in an automated manner which has led to losses in revenue and conflicts between drivers when they occupy others' reserved parking spots. To mitigate this upset and vehicle parking problems, this technology provides an intelligent parking system using drones, called SmartPark, with enhanced features of Vehicle License Plate Detection and Cloud Enabled Mobile Application. Drone based parking technologies can be implemented at a fraction of cost than the other parking technologies that are currently used and the difference in cost reduces further as the size of the parking lot increases.

Application & Market Utility

Recent advances in drone technology, such as longer battery life, has enabled technology such as this to be practically implemented. The software has the potential to make parking at large venues, such as businesses, shopping malls, sporting events, amusement parks, and others, much more efficient and user-friendly. This optimization can lead to greater customer satisfaction, additional revenues for the venue, and environmental benefits.

Next Steps

The research team seeks collaboration for further software development and commercialization as well as licensing opportunities.

TECHNOLOGY READINESS LEVEL 1-3

Seeking

Investment | Licensing | Research

Keywords

- SmartPark
- Intelligent Parking System
- Drones
- Parking Spot Detection
- Vehicle License Plate Detection

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