New intelligent parking system could revolutionize parking in smart cities

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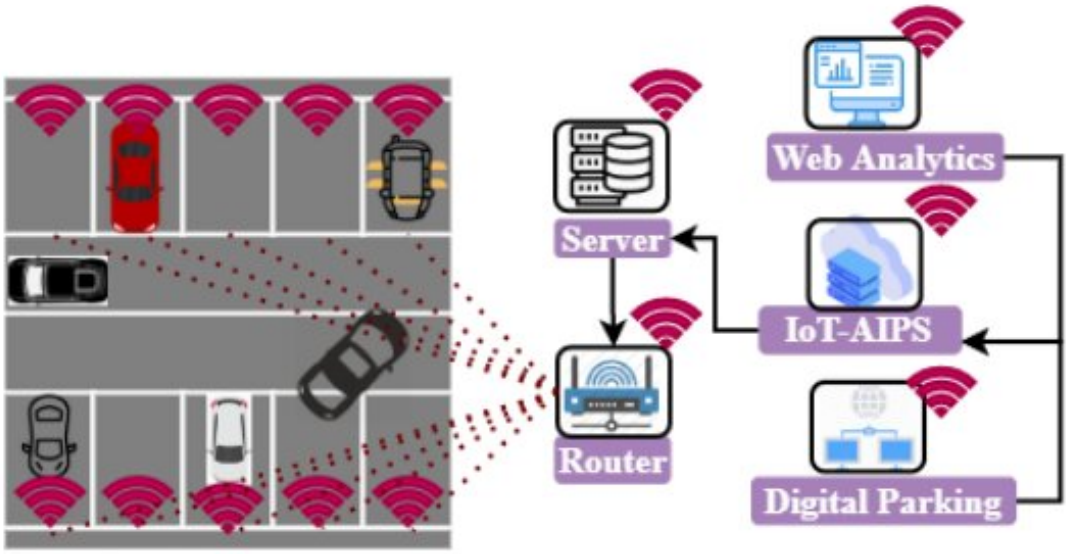

Proposed IoT assisted intelligent parking system (IoT-AIPS). Credit: IGI Global

As smart cities continue to grow, one of the most significant challenges faced by drivers is finding parking space. With the number of vehicles increasing every day, the lack of parking spots is becoming a significant issue. However, a new study published in the *International Journal of Grid and High Performance Computing* (*IJGHPC*) has proposed a solution to this problem using the Internet of Things (IoT).

Traditional parking space monitoring systems rely on dedicated sensors that can be expensive to install, making it challenging to implement them on a large scale. However, the emergence of IoT technology has made it possible to use embedded cameras to track parking space utilization at a much lower cost. To address the challenge of specifying parking space positions before drivers can use such devices, researchers proposed an IoT-assisted intelligent parking system (IoT-AIPS) with a cloud platform.

The IoT-AIPS system utilizes machine learning to classify the topology of the parking space based on stationary location, allowing for accurate predictions of available parking spots. This solution not only reduces waiting time for drivers but also enhances the accuracy of vehicle position prediction, making it easier to find a parking space in a crowded city.

The new technology could revolutionize parking in smart cities. The proposed IoT-AIPS system could significantly reduce installation costs and help address the parking space shortage that drivers face every day. By utilizing machine learning to accurately predict available parking spots, the driving experience in smart cities could be more convenient and stress-free.

As smart cities continue to grow, it is critical to develop innovative solutions that can address the challenges faced by drivers. The IoT-AIPS system could be a step in the right direction. With further research and development, this system has the potential to transform the way we park in smart cities.

More information: Jie Yang et al, Design of Intelligent Parking System Based on Internet of Things and Cloud Platform, *International Journal of Grid and High Performance Computing* (2023). DOI: 10.4018/IJGHPC.316836

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