Parking sensors

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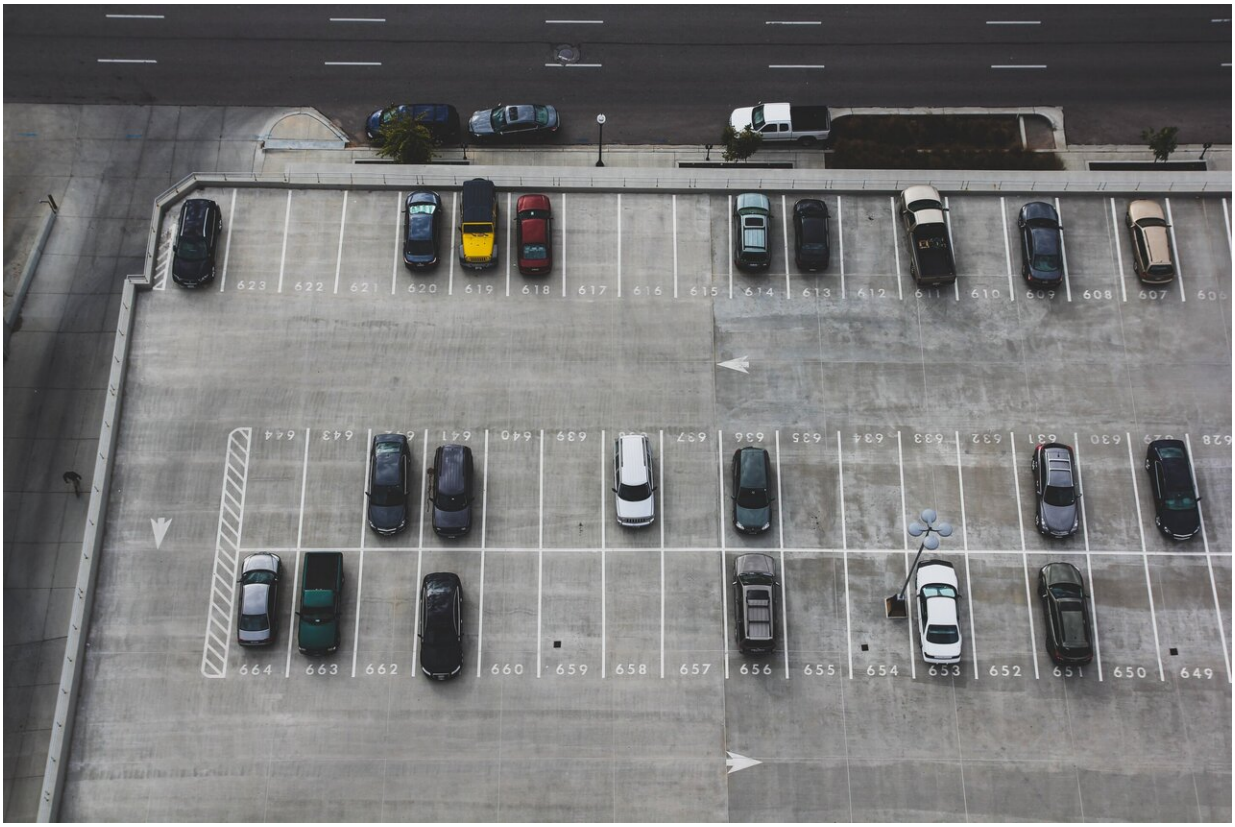

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Even in the middle of a pandemic lockdown, finding a good parking space can be a painful task. Now, work published in the *International Journal of Sensor Networks*, offers a new approach to parking space allocation based on a distributed computing algorithm.

Yong Chen of the Business School at Zhejiang University City College, in Hangzhou, China, and colleagues explain that parking space allocation, while perhaps not common in some cities, is an essential part of ensuring drivers can all be accommodated in the busiest of metropolises. The team's approach utilises a driver's navigation system to pinpoint them in the city, to glean their intended destination and to plot a route for them to follow to an available and hopefully optimal parking space. Such a distributed algorithm benefits from knowing where all of the users are, their intended destinations, and the availability of parking spaces across the city.

The team has demonstrated proof of principle under different levels of traffic and parking demand ratios. They point out that their distributed algorithm approach is most suitable for scenarios with high demand and high supply to demand ratio. It works better than other centralised algorithms that either work from the perspective of a single driver or a single car park. The distributed approach offers far greater adaptability, the team says, and provides more reliable results.

More information: Guanlin Chen et al. A parking space allocation algorithm based on distributed computing, *International Journal of Sensor Networks* (2020). DOI: 10.1504/IJSNET.2020.109196

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