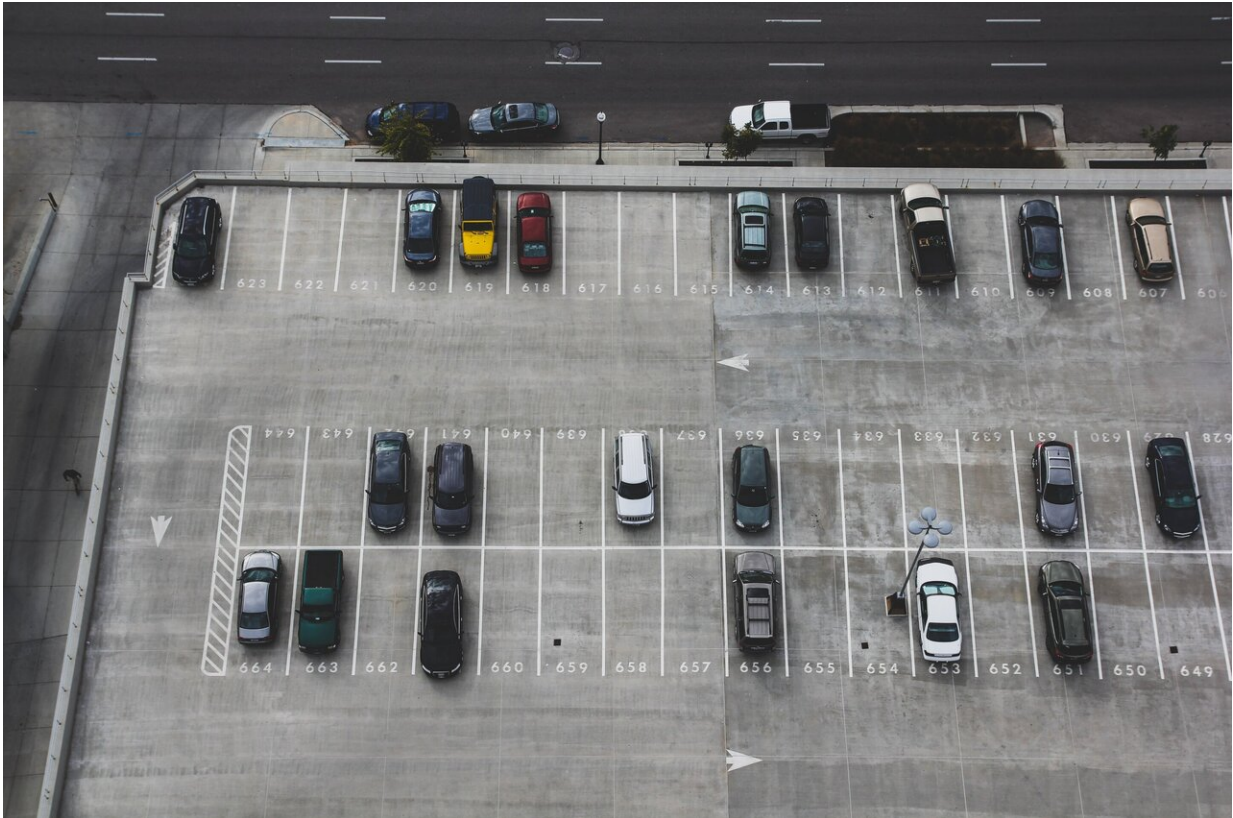


Parking sensors

September 7 2020, by David Bradley



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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](https://doi.org/10.1504/IJSNET.2020.109196)

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