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A mechanism of parking system based on blockchain and machine learning

Do you think to find a parking lot is hard for you? In Taipei, it is never easy! The government pays lots of budgets to build lots of parking lot and information systems, just to help us more easily to find a place to park. Once too many public parking lots in the market, it is not good for the market. The private parking lot will be closed due to the decrease in market demand, and the government needs to pay more budgets to build more public parking lots.

There are also some apps can help you to find a parking lot. Although they don't have any parking lot, they collect information of parking lots and provide them to everyone. But, what is the key problem? They need to maintain the data of parking lots by themselves and have no ways to make profits. Since the information of parking spaces change quickly, they don't have enough resource to maintain it in time.

It is also hard to convince the owner of the parking lot to provide the information just in time, so you may arrive at one parking lot and finally found no space to park. Since no incentive to the owner of parking lots, it is hard for them to provide information for our use.

I have a special idea can solve the problem. There are three things will be pointed out in my research. First, using blockchain to record the information about parking lots and make sure each owner of parking lots can have an equal opportunity to provide their parking lots to needers. Secondary, using a real-time bidding system to provide the parking spaces, you can pay more fees to get a near-space to park. When no one bid with you, you just pay a normal fee even a cheaper fee to get a parking space. Third, using machine learning and the internet of vehicles to predict the demanded of parking spaces and provide the owner of parking space a reference price.

Besides, the goal of the service is that everyone who has parking space can join the system and provide their parking space, thus we can increase the usage of parkable space in our city. The service is also a kind of self-cycling system. Through the bidding, the system can earn lots of profit and have the ability to continue the service itself, even to invite and help more partners to provide and improve their parking space. As a result, the driver can enjoy more parkable space, and the government also can reduce the non-meaningful budget of building parking lots.

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