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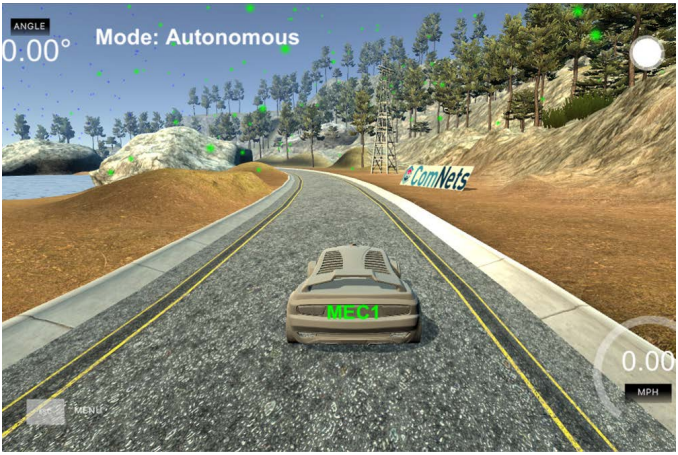
Seamless Service Migration in Mobile Edge Clouds for Autonomous Cars



Mobile Edge Cloud (MEC) enables cloud services in the proximity of user equipments (UEs). Such a design will be greatly beneficial to various latency-sensitive applications such as autonomous cars and AR/VR applications. Since user's mobility is one of the main characteristics of MEC, guaranteeing seamless service migration is essential to avoid service degradation. To this end, we propose a proactive migration approach that leverages a key-value system to rapidly sync application state between MEC servers. Owing to this design, service migration is performed with nearly zero downtime. In this demonstration, we show the efficiency of our approach for autonomous cars. Specifically, the steering control function of the car is migrated from one MEC server to another without any interruption. This allows keeping the car on the track.

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