

数学与系统科学研究院

计算数学所学术报告

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报告题目:

**Exploiting the Moving Intelligence:
Computation Offloading in Vehicular
Networks**

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报告时间: **2019 年 6 月 19 日 (周三)**

上午 10:00-11:00

报告地点: **科技综合楼三层**

311 报告厅

Abstract:

To satisfy the emerging need for autonomous driving, future vehicles will not only have rich on-board sensors like cameras and radars, but also be equipped with strong computing power to process the sensing data and make driving decisions. These computing resources can be shared among vehicles and for pedestrians on the road side, providing wide range of applications beyond autonomous driving. However, the dynamic environment of vehicular networks makes it challenging to guarantee the offloading delay, which consists of communication and computing delays. In this talk, aiming at timely computing in vehicular networks, we will illustrate how to use online reinforcement learning, in particular multi-armed bandit, to address the difficulties of acquiring system information in dynamic vehicular environment. We will also elaborate the way of further exploiting the mobility of vehicles with opportunistic computation offloading and coded computing, so as to enhance the delay performance and reliability of computation offloading.

欢迎大家参加！