



## Cooperative Perception, Communication and Computing for Autonomous Vehicles

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### Message from the Guest Editors

Dear Colleagues,

With the continuous evolution of wireless communication and artificial intelligence (AI), the swarm-intelligence-enabled cooperative driving (SICD) paradigm is becoming increasingly integral to autonomous vehicles. To improve the safety and efficiency of autonomous driving, substantial amounts of research have been devoted to vehicular resource allocation and multi-agent collaboration. However, the SICD performance is affected by the synergy between the cooperation of intelligence and the resource allocation of vehicular networks. Furthermore, the perception, communication, and computing resources of vehicular networks are coupled. Thus, swarm intelligence and multi-dimensional resources should reinforce each other to guarantee a good SICD performance. On one hand, multi-agent collaboration needs to consider underlying resource constraints. On the other hand, resource allocation needs to consider the influence of multi-agent interaction.





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## Message from the Editor-in-Chief

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