

# AutoMPC: Efficient Multi-Party Computation for Secure and Privacy-Preserving Cooperative Control of Connected Autonomous Vehicles

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# Challenges of Connected Autonomous Vehicles

- Security
- Privacy
- Efficiency
- Effectiveness
- Robustness
- And so on...

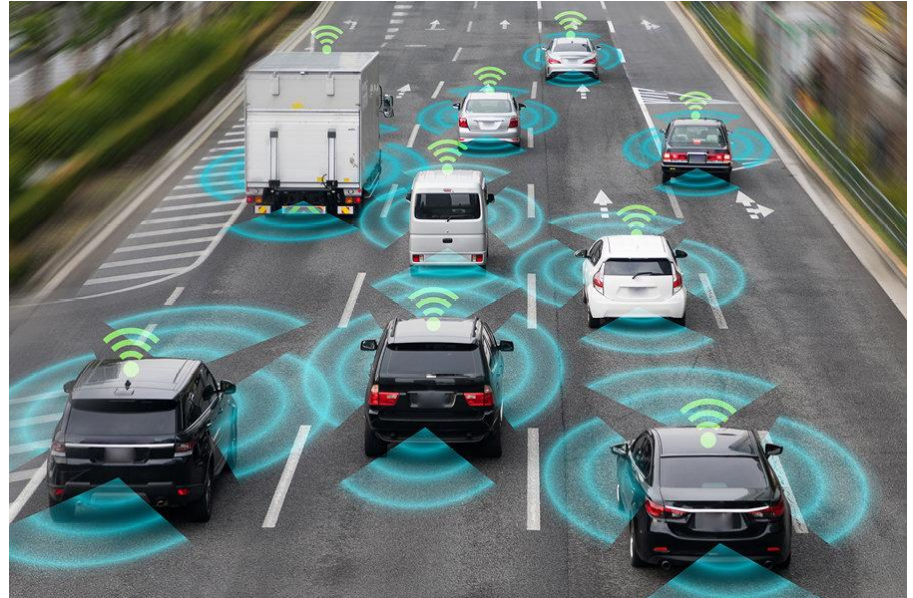



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# Our Approach

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- **Security and privacy** are guaranteed by a Secure Multiparty Computation (MPC) scheme.
  - **Efficiency and effectiveness** of the MPC is achieved by a distributed oblivious RAM and a function secret sharing scheme.
  - An adaptive proportional-derivative controller is proposed to increase **resilience** toward overheads and adversaries.



# Thank you!

Please come to our poster for details.

<https://taoli.me/publications/li2019autompc.pdf>

