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# Misbehavior detection for Collective Perception Service in C-ITS

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**Collective Perception Service in C-ITS** 

Misbehavior attacks new challenges





- Change of the perceived scene
- Ego perception is limited to its Field Of View (FoV)
- Word against word conflict situation



- Conflict degree calculation
- Opinion fusion for trust revision

→ may create dangerous situations at the intersection

I. Word against word conflict detected (vehicle26 & vehicle69)
II. Misbehaving station detected after opinion fusion

### Future work

- Complex attack scenario case study
- Misbehavior reaction & reporting
- Impact of perception uncertainty on misbehavior detection
- RSU based (semi centralized) misbehavior detection

#### References

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- Raya, M., Papadimitratos, P., Gligor, V. D., & Hubaux, J.-P. (2008). On Data-Centric Trust Establishment in Ephemeral Ad Hoc Networks. IEEE INFOCOM 2008 The 27th Conference on Computer Communications

