



A simple infrastructure modification for smart intersections for integration in semi-/full-autonomous vehicle systems in multiple municipality domains

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Abstract:

Intelligent Transportation Systems (ITS) and their integration with automated driving systems (ADS) are the guaranteed future. There is no doubt to the the future of vehicle-to-everything (V2X) systems being implemented in all developed countries, however there is a definite lag in the acceptance of autonomous vehicles into mainstream society. Currently, the systems in use still require human intervention due to certain uncertainties in driving conditions that have yet to be resolved in an automated sense, such as lane guidance and dynamic cruise control. The controlled intersection is one of those scenarios that is still heavily researched. This paper briefly investigates a method to retrofit this controlled intersections to expedite the progress towards full-autonomy while minimizing the costs for municipalities to upgrade their systems.

Antenna Retrofitting - Before



Antenna Retrofitting - After



Facts

- Humans are human. Machines are not.
- Despite breakthroughs, acceptance is slow.
- Penetration dependent on economic effects on various industries.
- Rapid advancement through small victories.

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