

Proactive Adaptation of Heterogeneous V2X Communication

Reliable and Scalable Communication for Maneuver Coordination

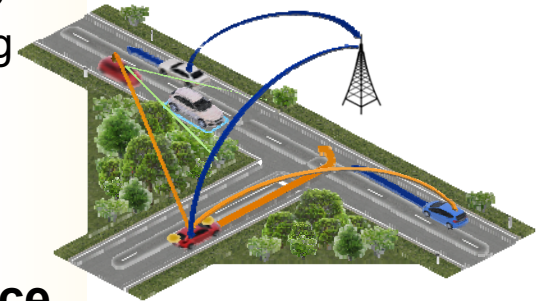


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Motivation

Vehicular cooperation to improve safety and efficiency

- Improve traffic flow and safety by cooperative decision making
- Collective perception increases environmental awareness
- Vehicular communication (V2X) enables cooperation



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Challenges

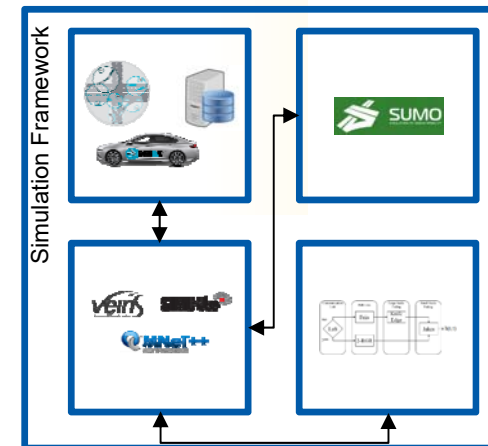
Dynamic environment and varying network performance

- Propagation channel suffers shadowing and fading
- Channel congestion at cooperation hotspots
- Context-aware communication quality demands

Contribution

Proactive Adaptation of V2X communication

- Dynamic communication requirements
- Relevance-aware information dissemination
- Collaborative channel monitoring and estimation
- Seamless, robust and efficient heterogeneous V2X Communication



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