Urbanloop control: from individual pods to network

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Résumé

This work focuses on control strategies for Urbanloop, an autonomous urban transport system. The work aims to design an advanced control law for individual pods to ensure safety and speed regulation. It then addresses network-level challenges such as collision avoidance, intersection management, and pod coordination using cooperative strategies. The proposed solutions will be validated through simulations and experimental trials, contributing to the efficient and scalable deployment of Urbanloop for urban mobility.

Mots-Clés: Control, modeling, autonomous vehicle, Urbanloop, networked system

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