STATISTICAL ANALYSIS OF CONNECTIVITY IN VEHICULAR NETWORKS

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ABSTRACT

Vehicular networks have been developed for assisting safe journeys through V2I (vehicle-to-infrastructure) and V2V (vehicle-to-vehicle) communications, while additionally providing entertainment services for drivers [1]. Due to random mobility of vehicles, the connectivity of a vehicular network changes over time, which can lead to unreliable communications between vehicles [2]. In this talk, we present a stochastic model for analyzing the connectivity of a vehicular network. In particular, we discuss statistical characteristics of the connectivity such as the probability distributions of connection and disconnection periods under free-flow traffic environments [3].

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