Smart Trust Management for Vehicular Networks

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Abstract : Spontaneous networks such as VANET are in general deployed in an open and thus easily accessible environment. Therefore, they are vulnerable to attacks. Trust management is one of a set of security solutions dedicated to this type of networks. Moreover, the strong mobility of the nodes (in the case of VANET) makes the establishment of a trust management system complex. In this paper, we present a concept of ‘Active Vehicle’ which means an autonomous vehicle that is able to make decision about trustworthiness of alert messages transmitted about road accidents. The behavior of an “Active Vehicle” is modeled using Petri Nets.