Abstract

When Vehicles communicating among themselves, and communicating to devices located in the margins of roads and highways form Vehicular Ad hoc Networks (VANETs) that are a suitable type of Mobile Ad hoc Networks (MANETs). VANET can go up to a high speed of network nodes that can go up to 200 km/h, and which impacts directly on the capability the network has to deliver data, we can have a network formed for a small amount of time. Ant-based routing can be successfully incorporated to both wireless and wired networks as it has been tested in various tests. This work sets up to propose Ant Colony Optimization (ACO) methodologies that take advantage of information available in vehicular networks such as the vehicles' position and speed, in order to design an ant-based algorithm that performs well in the dynamics of such networks and adapts to the conditions appropriately.

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Index Terms

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