Abstract

The emerging capabilities of mobile devices have given a new direction to the internet, which decreases the cost and allow us to use infrastructure wireless networks and infrastructure less wireless networks (i.e. Mobile Ad Hoc Wireless Network). Mobile ad-hoc network (MANET) is one of the most encouraging fields of research and development of wireless network. Sending information across the network from a source to a destination is one of the major issues in communication network. In a mobile ad hoc network, the complexity increases due to various characteristics like dynamic topology, absence of centralized authority, time varying QoS Requirements etc. To overcome this problem a number of routing protocols have been developed. It is not easy to determine which protocols may perform well under a number of different network scenarios such as network size and topology etc. In this paper we provide an overview of a wide range of the existing routing protocols with a particular focus on their characteristics and functionality using Ant Colony Optimization (ACO) technique for developing routing algorithms for ad hoc networks.
References

5. Ssowjanya harishankar, Energy Aware Ant Colony Optimization Based Routing For Mobile AD HOC Networks.
6. Osama H. Hussein, Member, IEEE, Tarek N. Saadawi, and Myung Jong Lee, Senior Member, IEEE, Probability Routing Algorithm for Mobile Ad hoc networks’ Resources Management.
10. Giancarlo Pellegrino, relatore Prof. Ing. Salvato Riccobene - “Analisi basata su simulazione delle prestazioni delle reti MANET in ns2” - Progetto finale; Security in Manet.
13. Krishna Gorantala, Ume’ai Routing Protocols in Mobile ad-hoc Networks University Department of Computing Science SE-901 87 UME’A SWEDEN.
17. Manjula Poojary, B. Renuka ANT COLONY OPTIMIZATION ROUTING to MOBILE AD HOC NETWORKS in URBAN ENVIRONMENTS.


**Index Terms**

Computer Science Wireless

**Keywords**

ACO, MANET, OLSR, AODV, DSR, TORA, Routing Protocol, QoS