

Cluster Based Ant Colony Routing Algorithm for Mobile Ad-Hoc Networks

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Abstract : Ant colony based routing algorithms are known to grantee the packet delivery, but they suffer from the huge overhead of control messages which are needed to discover the route. In this paper we utilize the network nodes positions to group the nodes in connected clusters. We use clusters-heads only on forwarding the route discovery control messages. Our simulations proved that the new algorithm has decreased the overhead dramatically without affecting the delivery rate.

Keywords : ad-hoc network, MANET, ant colony routing, position based routing

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