

Genetically Optimized Cluster based Routing Algorithm for Mobile AD-HOC Networks

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Abstract – Many issues in MANETs are formulated as multidimensional optimization difficulties. Genetic Algorithm (GA) is a modest, effective and computationally effective optimization algorithm. It uses to address MANET issues such as node localization, optimal deployment, clustering and data-aggregation. This paper is focused toward the development of weighted cluster based routing algorithm optimized by Genetic algorithm. Simulation has been carried out on MATLAB-2010a and performance of proposed algorithm is compared with conventional AODV routing algorithm based on network throughput, Network lifetime and End-to-End delay.

Keywords – AODV, Genetic Algorithm, MANET, Lifetime, Throughput and End-to-end delay.