A novel evolutionary approach for load balanced clustering problem for wireless sensor networks
8. Conclusions

In this paper, we have presented a GA based load balanced clustering algorithm for WSN. The algorithm has been described with proper chromosome representation, generation of initial population, selection process, followed by the crossover and mutation operations. The experimental results have shown that the performance of the algorithm is better than the GA based clustering algorithm, simple GA, Differential Evolutionary approach, Load Balanced Clustering (LBC) and the Least Distance Clustering (LDC) algorithm in terms of load balancing of the gateways for equal as well as unequal load of the sensor nodes. It is observed that the proposed algorithm provides superior performance in terms of energy consumption, number of active sensor nodes, rate of convergence and the execution time.