Abstract

In recent years, with the increase in the devices like Smartphone’s, Global Positioning System (GPS) monitoring devices, tablets, surveillance cameras etc...The numbers of devices that have been connected to the Internet have crossed the world population. The decrease in the cost of the devices, with increase in their capability was one of the major reasons for this change. With the increase in the devices connected to the network, there is enormous data that is produced by the devices on daily basis which has caused problem of selecting the devices (sensors) based on the data produced by them. The users have to face the problem of manually selecting the set of sensors required by them. To target this problem, the proposed work has implemented, the ant based clustering algorithm with some novel changes in order to provide the user with the optimal set of sensors. The algorithm intakes the whole sensor space and outputs the clusters from which the user can choose the one which is most optimal according to the user needs. The antclust algorithm strives to provide optimal solution and maintain its performance while fighting the dynamicity of the Internet. The proposed work shows better scalability and adaptability. Also has faster search of the sensors than the other works.
An Efficient Clustering of Sensors using a Meta Heuristic Algorithm for IoT

previously proposed.

References


Index Terms

Computer Science       Algorithms

Keywords

AntClust, Contiki, Cooja, Internet of Things (IoT)