Abstract

The wireless sensor nodes are getting smaller, but Wireless Sensor Networks (WSNs) are getting larger with the technological developments, currently containing thousands of nodes and possibly millions of nodes in the future. To deal with the large volume of data produced by these special kinds of wireless networks, one approach is use of Data Mining techniques. Classification is an important task in data mining. Classification of sensory data is a major research problem in WSNs and it can be widely used in reducing the data transmission in WSNs effectively and also in process monitoring. In this paper, Labelled Wireless Sensor Network Data is used for mining. This multihop data consist of humidity and temperature measurements. To mine the sensor data three classification techniques J48(Decision Tree), Naive Bayes, and ZeroR are considered in this study. Experimental investigation yields a significant output in terms of the correctly classified instances. At the end it has been found that Naive Bayes is a suitable method to classify the large amount of data considered is made finally according to the mining result.
Comparative Study of Classification Techniques with Labeled Data in Wireless Sensor Network

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Index Terms

Computer Science  Wireless

Keywords

Wireless Sensor Networks  Classification  Decision Trees