Abstract

Wireless sensor network (WSN) is one of emerging trends in networking technologies being used for communication purpose in modern life. It has mainly comprised of small sensor nodes (SNs) with limited resources. Individual SNs are connected with each other and make the communication possible. Enhancement in the communication among sensor nodes or Sensor-to-Sink nodes is today’s most prominent objective. In this paper we have surveyed artificial neural network for different QoS parameters of WSN. Artificial neural network (ANN) is very prominent emerging area for WSN applications. Generally, artificial neural networks are classified in supervised learning and unsupervised learning. Unsupervised learning includes algorithms like Hebbian, Winner-take-all, ART, ART1, ART2, counter propagation network etc.

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Index Terms

Computer Science Artificial Intelligence

Keywords

Wireless sensor network; artificial neural network; unsupervised learning; supervised
learning; Fuzzy ART; ART1; ART2; perceptron model; error back propagation; quality of
services.