Machine Learning in Wireless Sensor Networks:

Algorithms, Strategies, and Applications

This paper is a culmination of all the efforts done in the field of machine learning and WSN. The property of the environment is that its dynamic and susceptible to constant changes which are a result of external intervention or the inherent design of the designer. This paper looks into the all the various strategies that have been used in the past decade. The pros and cons of all the methods are highlighted.

WSN’s are ubiquitous and range from a variety of resources like chemical, acoustic, temperature etc. They are also faced with the same problems like data localization, aggregation etc. Due to the multitude of changing conditions WSN’s are in a constant need for re-programming which is a arduous and a resource intensive task. Thus when ML was introduced in the 50’s, it was considered as a potent tool to counteract this unpredictability. They exploit the historical data to analyse and predict trends and extract patterns which are vital in management of WSN’s. This paper goes through various machine learning algorithms and recounts it’s functioning through various conditions.