Electricity is the main observation in our daily life. There are many parameters or a factors on which the electricity load is depends on, knowable load factors such as whether conditions, temporal factors, and customer characteristics etc. Daily peak load is an important factor in the planning the production and pricing of electricity. In a simple terms, it is essential to get the knowledge of the local system demand will be on the next minutes, hours and days so that the generators with various startup times, startup cost can be changes as per the requirement and knowledge gain from the previous data collected. This paper is intended for industry/organization to optimize Electricity usage. Energy consumption and pricing analysis is a primary area in power systems planning and management. Recent developments in energy market deregulation and provision of sustainable energy have contributed to increase interest in this area. The prices are not fixed and are affected by demand and supply of the market. The prices in electricity market can be set every five minutes. With this motivation, an algorithm is proposed for efficient Classification of concept Drifting Electricity pricing data streams. Thus, it is a challenge to learn from concept drifting data streams. In proposed algorithm, a decision tree is built incrementally and also used to develop training set based on these methods, in order to improve the accuracy of classification and prediction models under concept drift. A base learner is adaptive, a decision tree can have its nodes included and deleted dynamically.
Adaptivity can be achieved by manipulating training data (instance selection), instead of taking all training history, take a number of the latest instances (training window). The new proposed algorithms detect change faster, without increasing the rate of false positives. Extensive studies on both synthetic and real-world data demonstrate that proposed algorithm outperforms well compared to several state-of-the-art online algorithms. In this paper we have compared electricity datasets with three algorithms to find out the algorithms efficiency on type of dataset. This data is again tested for error value for a particular number of iteration. The experimentation is conducted. The experimental evaluation produced satisfactory results.

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Index Terms

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