Abstract

The rapid development of human population has seen rapid expansion of electric consumptions in buildings and technological application based devices. The necessity of efficient energy management and forecasting energy consumption for devices and buildings know no bounds. Proper development and decision-making follows suite when such criteria are met. Building electrical energy forecasting method using artificial intelligence (AI) methods such as support vector machine (SVM) and artificial neural networks (ANN) is a potential approach for such purpose. In this paper, the possibility of a time-series based approach to an energy consumption prediction problem using state-of-the-art technologies such as LSTM and RNN is explored and hence proved that it indeed works.

References


Index Terms

Computer Science

Information Sciences
Keywords

LSTM, RNN, Time Series, Predictive Machine Learning, Smart Home, Energy Consumption