

عنوان مقاله:

Application of nuSupport Vector Regression in Short- Term Load Forecasting

محل انتشار:

نوزدهمین کنفرانس اپتیک و فوتونیک ایران و پنجمین کنفرانس مهندسی فوتونیک ایران (سال: 1391)

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نویسندگان:

Adnan Omid - Faculty of Electrical and Computer Sistan and Baluchestan University, Zahadan, Iran

S Masoud Barakati - Faculty of Electrical and Computer Sistan and Baluchestan University, Zahadan, Iran

Saeed Tavakoli - Faculty of Electrical and Computer Sistan and Baluchestan University, Zahadan, Iran

خلاصه مقاله:

Short-term load forecasting (STLF) of electric power systems plays an essential role in the optimal operation of power systems. Economic performance and reliability of a power system is substantially dependent on the load prediction. STLF is a complex process in electric grid due to having many non-linear factors, such as daily and weekly cyclical changes. Support vector regression has a good ability to estimate non-linear equations. In this paper, a new support vector machine model called nu support vector regression (nu-SVR) is proposed for electrical load forecasting. Results of the proposed method are compared with forecasting results achieved using an artificial neural network (ANN). Results show that the nu-SVR is a proper method for STLF.

کلمات کلیدی:

Short-termloadforecasting, support vectorregression, multilayerperceptron (MLP)neural networks

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