

Название публикации:

Time series and data analysis based on hybrid models of deep neural networks and Neuro-Fuzzy networks

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Аннотация:

Deep Learning has proven to be an effective method for making highly accurate predictions from complex data sources. In this paper we consider approach to data analysis and time series forecasting based on hybrid models. These models contain a Deep NN models and Neuro-Fuzzy networks. We are show an overview of new approaches for data science field - time series and data analysis. Also, we propose our models of DL and Neuro-Fuzzy Networks for this task. Finally, we show possibility of using these models for data science tasks. This paper presents also an overview of approaches for incorporating rule-based methodology into deep learning neural networks. © 2018 Alexey N. Averkin, Sergey A. Yarushev.

Ключевые слова:

Data analysis, Data science, Deep learning, Forecasting, Fuzzy models, Hybrid models, Time series