

A Feature Interaction Model for High order dimensional data using Hopfield Network

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ABSTRACT

Discovering Feature interaction in the high dimensional data is the most challenging task in the research area of feature selection. “A Feature Interaction Model for High order dimensional data using Hopfield network” is based on recurrent neural network approach for feature selection which performs feature interaction using Hopfield network in a cloud based environment. The proposed model consists of Feature Pattern Associator and Feature Pattern Interactor. The Feature Pattern Associator associates the given feature pattern with the pattern stored in cloud Feature Memory database using Feature Cue Collector and Feature Auto Associator. Feature Pattern Interactor intends to achieve high-order feature interaction. The Experimental results on the four AWS cloud medical databases show that a proposed Feature Interaction Model achieves feature interaction better than existing Feature Selection Models.

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