Original Articles

用于多层感知机学习的修正分层优化算法

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摘要 该文提出了一个改进算法,试图更有效地在OLL每一次试迭代中找到一个权改变向量. 提出的算法可节省计算量,与原来的OLL算法相比,特别对于较大网络,可提高收敛速度. 用改进的算法用于时间序列预测问题的计算,显示出更快的学习能力.

关键词 快速学习算法 多层感知机

分类号

Modefied optimization layer by layer algorithm for learning multilayer perceptrons

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Abstract In this paper a modified learning procedure is presented which tries to find a weight change vector at each trial iteration in the OLL algorithm more efficiently. The proposed learning procedure can save expensive computation efforts and yield better convergence rate as compared to the original OLL learning algorithms especially for large scale networks. The improved OLL learning algorithm is applied to the time series prediction problems presented by the OLL authors, and demonstrates a faster learning capability.

Key words <u>Multilayer perceptron</u> <u>faster learning algorithms</u>

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