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### DOBD Algorithm for Training Neural Network: Part II. Application

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收稿日期 修回日期 网络版发布日期 接受日期

**摘要** In the first part of the article, a new algorithm for pruning network Dynamic Optimal Brain Damage (DOBD) is introduced. In this part, two cases and an industrial application are worked out to test the new algorithm. It is verified that the algorithm can obtain good generalization through deleting weight parameters with low sensitivities dynamically and get better result than the Marquardt algorithm or the cross-validation method. Although the initial construction of network may be different, the final number of free weights pruned by the DOBD algorithm is similar and the number is just close to the optimal number of free weights. The algorithm is also helpful to design the optimal structure of network.

**关键词** [neural network](#) [DOBD algorithm](#) [Marquardt method](#) [overfitting](#) [pruning](#) [training application](#)

**分类号** [N945.12](#)

**DOI:**

对应的英文版文章: [2023-014](#)

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