

**Simard, D.; Nadeau, L.; Kröger, H.**

**Fastest learning in small-world neural networks.** (English) Zbl 1136.68504  
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Summary: We investigate supervised learning in neural networks. We consider a multi-layered feed-forward network with back propagation. We find that the network of small-world connectivity reduces the learning error and learning time when compared to the networks of regular or random connectivity. Our study has potential applications in the domain of data-mining, image processing, speech recognition, and pattern recognition.

**MSC:**

**68T05** Learning and adaptive systems in artificial intelligence

**92B20** Neural networks for/in biological studies, artificial life and related topics

Cited in **3** Documents

**Full Text:** [DOI](#)

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