Abstract

Artificial Neural Networks (ANN) are extremely useful to relate the nonlinearly depending outputs with the inputs. Various architectures are available for the ANNs to speedup the training period and reduce the square error. In this paper, new classes of neural networks with differential feedback are presented. The different orders of differential feedback form a manifold of hyperplanes. Interesting properties of this differentially fed ANN (DANN) are derived through these hyperplanes.

Reference


Index Terms
Computer Science
Artificial Neural Networks

Key words
Differential Learning Algorithm for Artificial Neural Networks

Adaptive control

Neural networks

Differential feedback

Multiresolution