

Stability of discrete-time Hopfield neural network with delay

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Abstract

Based on a new abstract result on the behavior of nonautonomous delayed difference equations, we obtain a stability result for the solutions of a general discrete nonautonomous Hopfield neural network model with delay. When we apply our main result to the particular case of a periodic Hopfield model, we generalize the criterion in [1] for the existence and global stability of a periodic solution. This talk is based on joint work with António G. Bento and César Silva [2].

References

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