

LIN WANG, McMaster University, Hamilton, Canada
Convergence of Discrete-Time Neural Networks with Delays

An LMI (Linear Matrix Inequality) approach and an embedding technique are employed to derive some sufficient conditions for the global exponential stability of discrete-time neural networks with time-dependent delays. For networks with time-dependent parameters with constant delays, by using the property of internally chain transitive sets, it is shown that these conditions are also sufficient for the convergence.