

STABILIZABILITY FOR NONLINEAR DIFFERENCE CONTROLS SYSTEMS WITH MULTIPLE DELAYS

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Abstract. In this paper, we investigate the problem of stabilizability for nonlinear difference controls systems with multiple delays. We present a generalized discrete Gronwall's inequality for stabilizability analysis of this systems. Based on a new Gronwall's inequality, sufficient conditions for stabilizability of this systems are obtained. Numerical examples illustrate the results are given.

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