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Experiment-based Performance Improvement of State Feedback Control Systems for Single Input Processes

By: Radac, MB (Radac, Mircea-Bogdan)^[1]; Precup, RE (Precup, Radu-Emil)^[1]; Petriu, EM (Petriu, Emil M.)^[2]; Preitl, S (Preitl, Stefan)^[1]

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Abstract

This paper gives an extension to the Iterative Feedback performance improvement of state feedback control sensitivity functions and the experiments conducted an efficient way to deal with the nonlinear or ill-defined Quadratic Regulator (LQR) is not successful. An explicit time iterative calculation of the gradients in the minimization of the cost function. The experimental results validate the performance of the application which deals with the angular position control zone and control signal saturation. The results show the effectiveness of the proposed single input process application.

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Author Information

Reprint Address: Radac, MB (reprint author)

+ Politehn Univ Timisoara, Dept Automat & Appl Informat, Bd V Parvan 2, RO-300223 Timisoara, Romania.

Addresses:

+ [1] Politehn Univ Timisoara, Dept Automat & Appl Informat, RO-300223 Timisoara, Romania

+ [2] Univ Ottawa, Sch Elect Engn & Comp Sci, Ottawa, ON K1N 6N5, Canada

E-mail Addresses: mircea.radac@aut.upt.ro; radu.precup@aut.upt.ro; petriu@eecs.uottawa.ca;
stefan.preitl@aut.upt.ro

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