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Designing Intelligent Adaptive Controller for Nonlinear Pendulum Dynamical System

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Abstract : This paper proposes the designing direct adaptive neural controller to apply for a class of a nonlinear pendulum dynamic system. The radial basis function (RBF) neural adaptive controller is robust in presence of external and internal uncertainties. Both the effectiveness of the controller and robustness against disturbances are importance of this paper. The simulation results show the promising performance of the proposed controller.

Keywords : adaptive neural controller, nonlinear dynamical, neural network, RBF, driven pendulum, position control
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