

Neurodynamic Adaptive Control Systems

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Abstract: Precision adaptive control has been accomplished using a neural network to generate the required system dynamics, given the desired input and output. That is, an artificial neural network has been designed and incorporated into an adaptive control system to function as a synthesizer of a dynamic plant which senses and continually reduces, in a learning sense, the system error. This approach is called neurodynamic adaptive control since the system dynamics are modeled by an adaptive neural topology.

Keywords:

AMS Subject Classification: