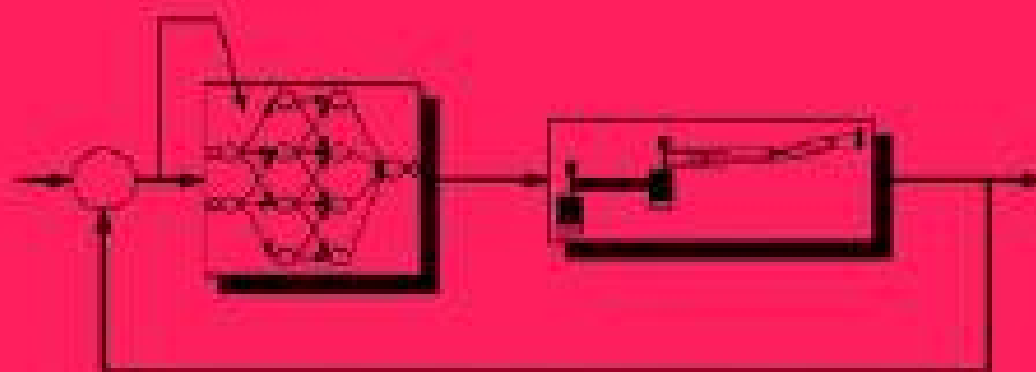


# Lecture Notes in Control and Information Sciences 261

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## Control of Flexible-link Manipulators Using Neural Networks



Springer

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# Control of Flexible-Link Manipulators Using Neural Networks

H.A. Talebi

keep an eye on of Flexible-link Manipulators utilizing Neural Networks addresses the problems that come up in Control of Flexible-Link Manipulators Using Neural Networks controlling the end-point of a manipulator that has an important quantity of structural flexibility in its links. The Control of Flexible-Link Manipulators Using Neural Networks non-minimum part Control of Flexible-Link Manipulators Using Neural Networks characteristic, coupling effects, nonlinearities, parameter adaptations and unmodeled dynamics in this sort of manipulator all give a contribution to those difficulties. regulate innovations that forget about those uncertainties and nonlinearities typically fail to supply passable closed-loop performance. This monograph develops and experimentally evaluates a number of clever (neural community based) keep an eye on ideas to deal with the matter of controlling the end-point of flexible-link manipulators within the presence of all of the aforementioned difficulties. to spotlight the most issues, a truly flexible-link manipulator whose hub indicates a large amount of friction is taken into account for the experimental work. 4 varied neural community schemes are proposed and applied at the experimental test-bed. The neural networks are proficient and hired as on-line controllers.

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