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EXPERT SYSTEM APPROACH IN DESIGNING KNOWLADGE-BASED CONTROLLER

In this article the knowledge-based control approach will be proposed for nonlinear systems. Firstly some basic concepts from the artificial intelligence will be defined, then the expert system design process will be introduced and finally a practical example will be discussed. The principle of this method is to support the controller with the human-like reasoning to determine the appropriate control mode and to estimate unknown parameters. Note that this is the heuristic approach, hence neither optimal steering, nor stability is guaranteed.

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