Abstract

In this paper, robust controller is developed by using H8 controller to improve the performance of the Inverted Pendulum. In this paper, introduced a controller by combining the classical PID, the fuzzy controllers and H8 controller and thus a new controller has been achieved. The simulations done on inverted pendulum using the new H8 fuzzy PID controller provides better system responses in terms of transient and steady-state performances when compared to the pure classical PID or the pure fuzzy controller applications.

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**Index Terms**

Computer Science Applied Sciences

**Keywords**

Inverted Pendulum PID Controller Fuzzy Logic controller