

Controlling the pitch and yaw angles of twin rotor MIMO system in simulation-based platform using fuzzy logic controller and PID controller

ABSTRACT

In this paper, the PID and fuzzy logic controllers are designed to control the pitch and yaw angles of a twin rotor MIMO system (TRMS) in simulation-based platform. Two controllers were used in each case, one for pitch angle and one for yaw angle. The twin rotor MIMO system designed as decoupling system in simplification. The tuned controllers gave a very good response in the simulation. These results will provide a solid base for designing the final optimized real-time controller in the next stages of the research.

Keyword: Fuzzy logic controller; PID controller; Twin rotor MIMO system