Course Name: Fuzzy Logic with Applications
Course No.: ELEN-870

Project Title:

PID and Fuzzy-PID Control Model for Quadcopter Attitude with Disturbance Parameter

Instructor:
Dr. Abdollah Homaifar

Team member:
1. Mrinmoy sarkar
2. Brian Baity

Objective:

The objective of the project is to build a fuzzy PID controller to control the attitude of a quadcopter and to test the performance of the controller on a simulated quadcopter. MATLAB and Simulink will be used to build the simulation environment.

State of the Art:

There are many approaches for quadcopter controller. Some of them are listed below:

- PID/PD controllers
- Fuzzy Controllers
- Sliding mode controllers
- Neuro-fuzzy controllers
- Vision-based controllers etc.

Reference:

1. "PID and Fuzzy-PID Control Model for Quadcopter Attitude with Disturbance Parameter" by E. Kuantama, T. Vesselenyi, S. Dzitac, R. Tarca, INTERNATIONAL JOURNAL OF COMPUTERS COMMUNICATIONS & CONTROL