Review of: "Neuro-Fuzzy-Based Adaptive Control for Autonomous Drone Flight"

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Potential competing interests: No potential competing interests to declare.

Dear Editor

The article titled Neuro-Fuzzy-Based Adaptive Control for Autonomous Drone Flight was studied and reviewed. In this articledesign, development, and application of an intelligent adaptive hybrid controller to control and stabilize the drone is concentrated. The following items related to this article are described below.

1. Refer to the specifications of the quadrotor used for the algorithms in the text of the article.
2. There is confusion in the formulas on page 5 of the first paragraph, it should be corrected.
3. On page 6, why is the angular velocity of r not included in the definition of X?
4. As mentioned in the abstract of the article, the flight data were produced by the linear LQR method, unfortunately, there is no explanation about this in the text of the article. Also, the use of data generated by the linear method, which is noise-free, is not suitable for evaluating the performance of the designed controller, and it is better for the authors to use real quadrotor flight data for this purpose.
5. In figures 4 to 9, the time to reach the desired angle is about 30 seconds. This long time is not reasonable and indicates poor performance of the controller.
6. According to the claim of the authors, the presented control algorithm is an adaptive and non-linear method. It is not logical to compare this non-linear controller with the classic PID controller and it is better to compare it with the common non-linear controllers used for the quadrotor.

This article can be considered for acceptance and publication after applying these corrections.

With Regards