

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

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Potential competing interests: No potential competing interests to declare.

This paper presents a control algorithm using Adaptive Neuro-Fuzzy Inference Systems (ANFIS) combined with the Linear Quadratic Regulator (LQR). There are some comments as follows:

In the abstract, the explanation seems to focus on a situation where white noise disturbance will appear, probably under a fault condition. However, such situations disappear from the "experimental results." Therefore, the abstract should be written to be consistent with the results.

In the introduction, the authors address a clear problem statement with the purpose of designing an adaptive controller that can adjust to the changing system online. However, the results don't show this ability.

In the related work section, the authors address previous works, focusing on related techniques to the proposed method. Some other existing techniques should be included.

The proposed method section should be written in such a way that the overall algorithm is presented. The diagram in Fig. 1 doesn't give any idea to readers how the proposed method is different from others. A well-subscribed explanation to describe the whole details of how the LQR generates a training dataset to the ANFIS should be provided.

The experimental section should be more appropriately changed to "Numerical examples" Various situations such as noisy data or sudden changes in the model should be investigated to validate the controller performance.

All figures should be clearly displayed to compare the performance with others.