

# 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 proposes the design, development, and application of an intelligent adaptive hybrid controller to control and stabilise the drone. The training data for adaptive neuro-fuzzy inference systems (ANFIS) are generated by the Linear Quadratic Regulator (LQR) under white-noise disturbance. The trained ANFIS is subsequently used to estimate the parameters of the control distribution matrix for the actual fault condition and the reconfiguration is carried out by computing new feedback gain using the pseudo-inverse technique. For the simple adaptive controller, LQR is also used to generate the desired trajectories of the reference model. In both experiments, the extended Kalman filter is implemented due to its non-linearity benefit.

However, in the article some recent work done should be added in the field of metaheuristic optimization algorithms with fuzzy logic system, some of the recent work includes into the introduction section and discuss the how the proposed algorithm is different or better.

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However the paper can be accepted after the minor revision.