Type-2 Fuzzy logic Controller for UAVs Octocopter

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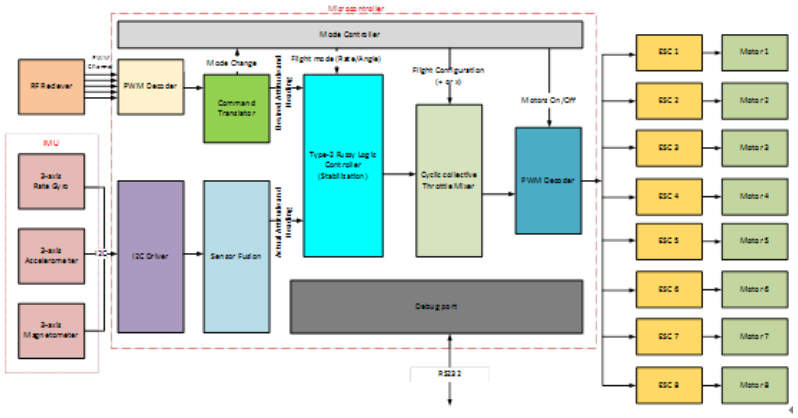
One of the big problem how to reach a region consist of island are difficult to reach that area by land or air, because there are separated by sea. The rural area usually do not have takeoff and landing area. If not supported by the right technology, it takes a lot of transport equipment and human resources to facing them.

UAVs has potential for fulfilling many civil and military applications including surveillance, intervention in hostile environments, air pollution monitoring, and area mapping. Moreover, UAVs capable of Vertical Take-off and Landing (VTOL) operations can provide many advantages over conventional manned aircraft, can be more maneuver nimble than fixed-wing aircraft.

The Octocopter has many advantages than other type of multi rotor such as Quad copter or Hexa copter. The Octocopter has bigger ability to lifting the payload and has more Robust to facing with real disturbance like erratic weather and motor failed during flight.

Therefore, The aim of this research is how to design mechanic has ability to lift high payload capacity and design control method to handle nonlinear, multivariable, and coupled characteristics of octocopter synergized adaptive method to handle disturbance because of wind and erratic weather.



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