

Trajectory Tracking Control of UAVs Octocopter

Student : Riska Analia

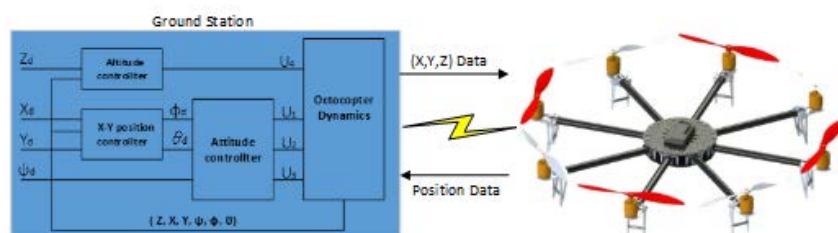
Advisor : Prof. Kai-Tai Song

Shooting for the making of a film or advertisement is very important to make it can be accepted by the audience. Sometimes, there are some scene which is difficult to take by human if is not assisted by tools. Or another thing is delivering a packet to the costumer without any helps from post office or other delivery services is faster and efficient.

To help people overcome, it requires the tool that can move automatically according to the desired point. One of a tool that can be used is the Uninhabited Aerial Vehicles (UAVs). UAV is a development of the technology with the ability to hover, yaw, or which can be done by helicopter or plane.

Octocopter is one of the UAVs which is has eight rotor where connected with each independent propellers. To make the movement of the UAV system automatically, it require a trajectory tracking control, which can be controlled according to the coordinates of the point that chill by the user.

The trajectory control will be done in ground station where we can give the X, Y, Z, or yaw angle as a input trajectory and after doing the calculation, the data will be send to the Octocopter through wireless. And then, the Octocopter will also send the position data to the ground station through the wireless.



Institute of Electrical Control Engineering, National Chiao Tung University

Intelligent System Control Integration (ISCI) Lab.

