

Materi 3

Prinsip Kerja & Jenis Airframe pada Drone

MOOC UNAIR

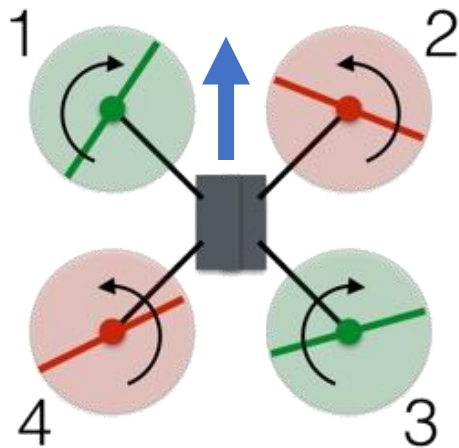
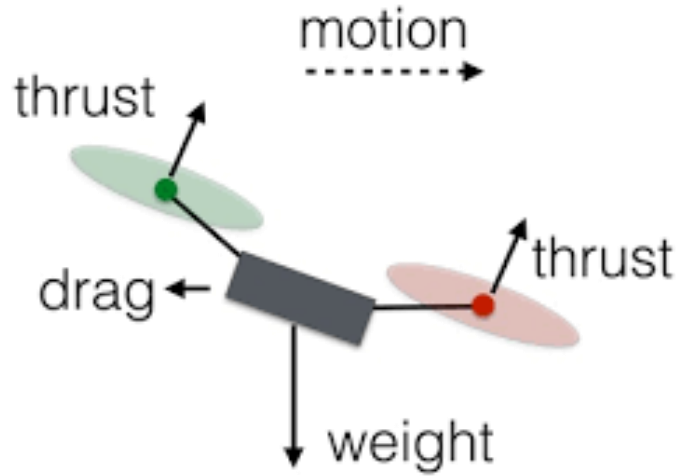
**Merakit dan Mengaplikasikan Robot Terbang/
Drone untuk Pemula dengan Menggunakan
Platform Open Source**



By : Muhammad Aldo Setiawan, S.Si., M.Sc (Eng)



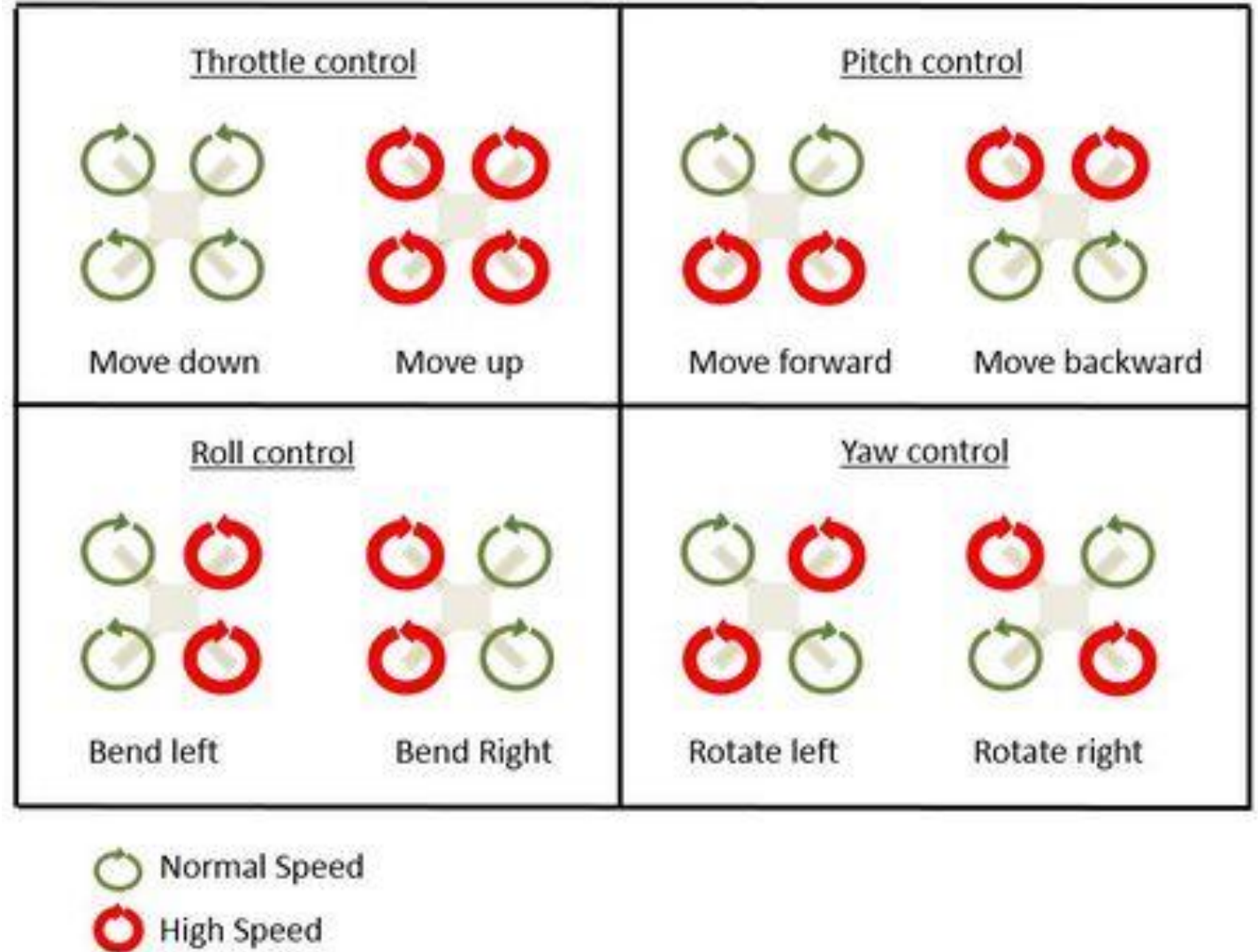
How Quad Copter Manoeuvre



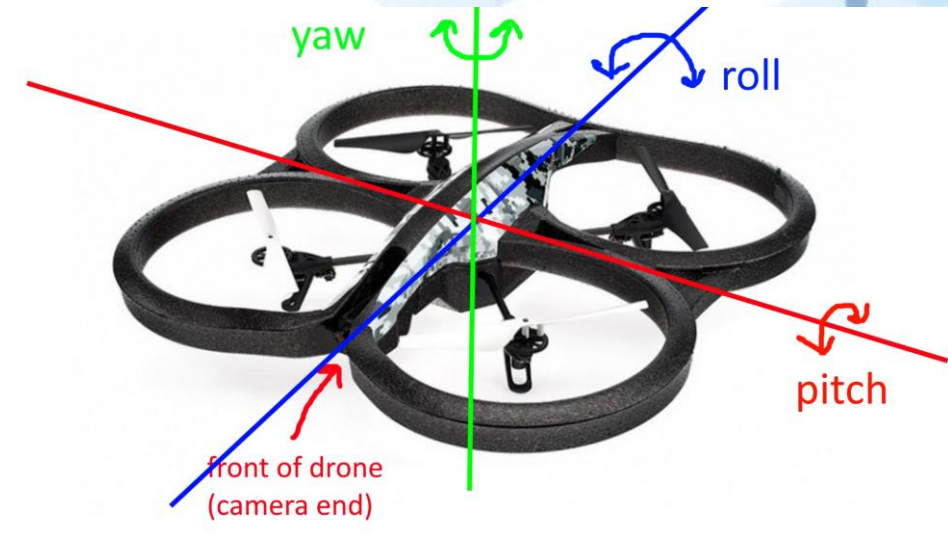
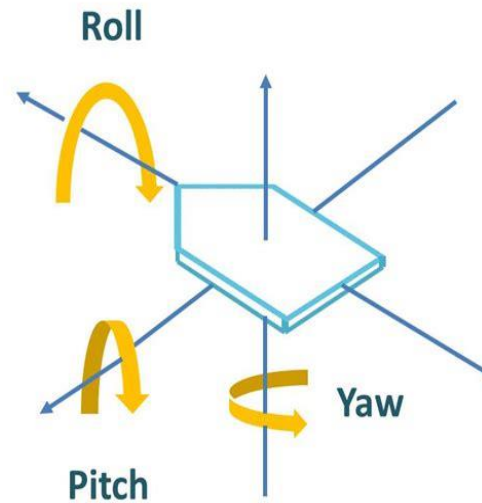
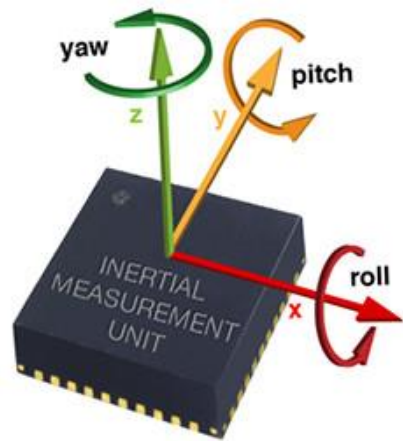
<p>1. Throttle Control</p>	<p>2. Pitch Control</p>
<p>3. Roll Control</p>	<p>4. Yaw Control</p>

How Quad Copter Manoeuvre

The Variation of speed between rotor that makes the Drone have manouvre flexibility



How do Multicopter stabilize?



Usually an IMU consists of the following sensors:

3-axis accelerometer: measures the accelerations along its axes

3-axis gyroscope: measures the rotational velocity around its axes

3-axis magnetometer: measures the local magnetic field components along its axes

Multicopter Airframe Types



Quad I



Quad X



Hex I



Hex V



Hexa V



Hex Y



Hex IY



Octo X



Octo I



Octo V



Tricopter



Coaxial Configuration
 Octo X