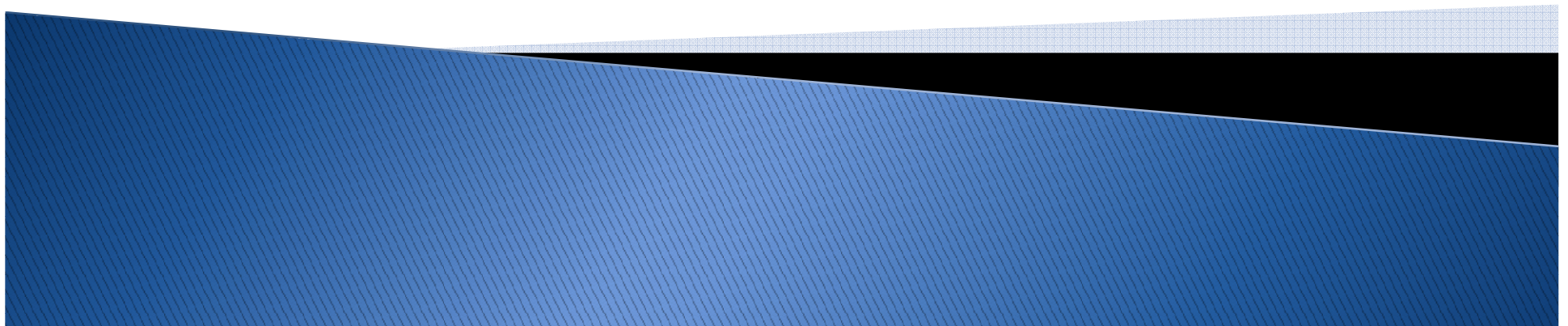


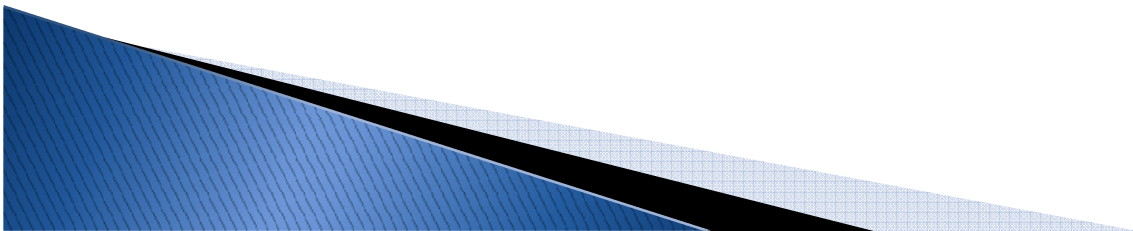
# QuadCopter

Peyton Zeller-Av and the QuadroTeam



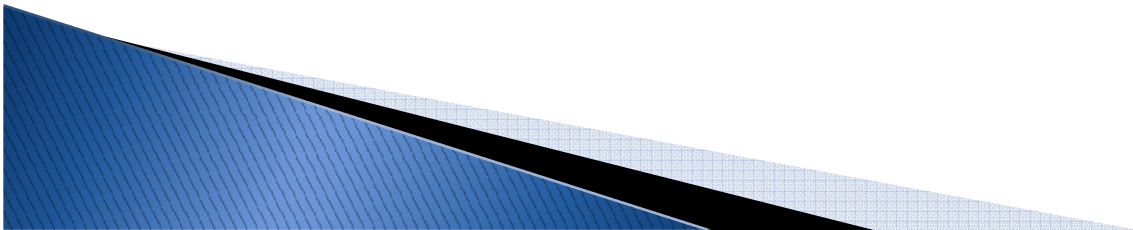
# What is a QuadCopter?

- ▶ Multi-rotor drone
  - Four rotors

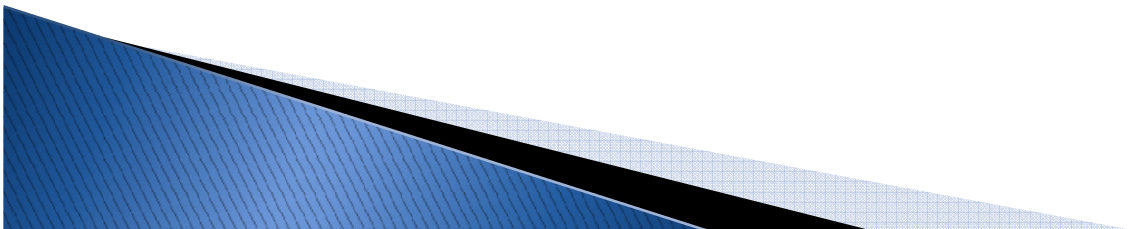
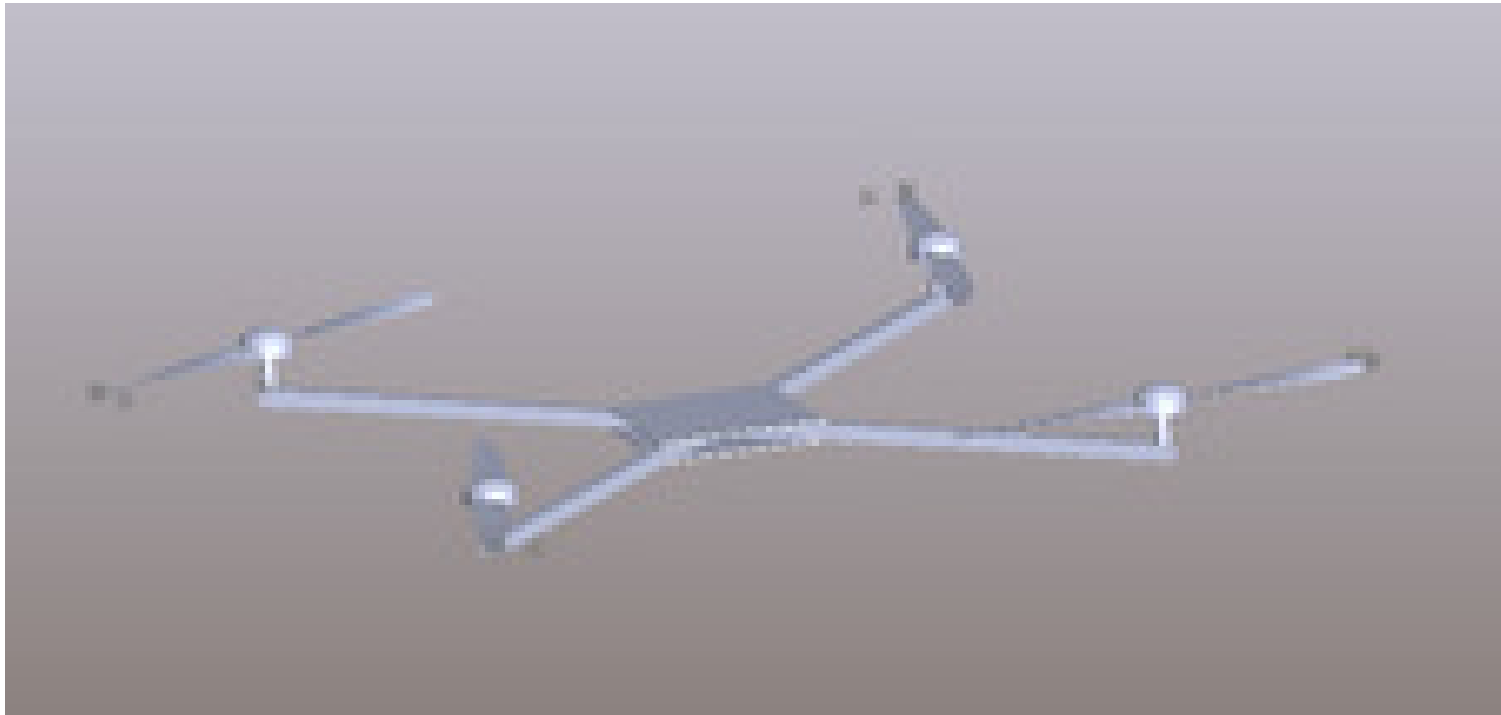


# Components

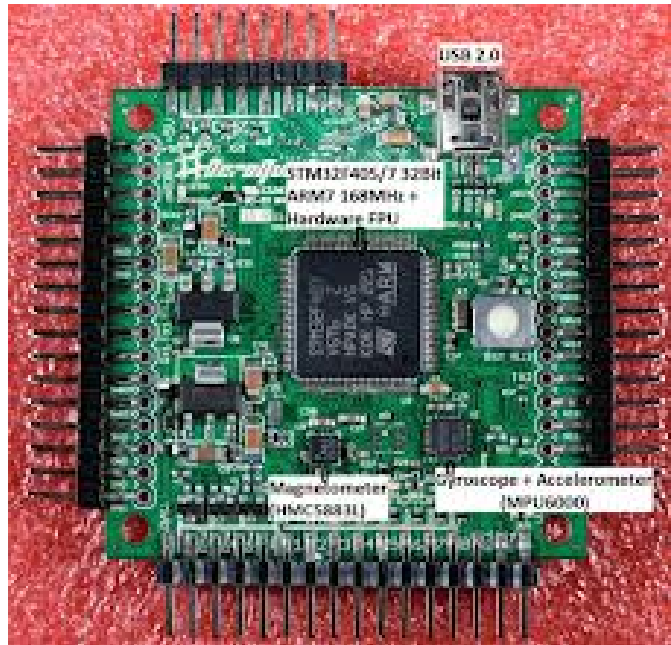
- ▶ Frame
- ▶ Propellers
- ▶ Flight controller
- ▶ RC transmitter
- ▶ ESC
- ▶ Motors



# Frame



# Flight Control System



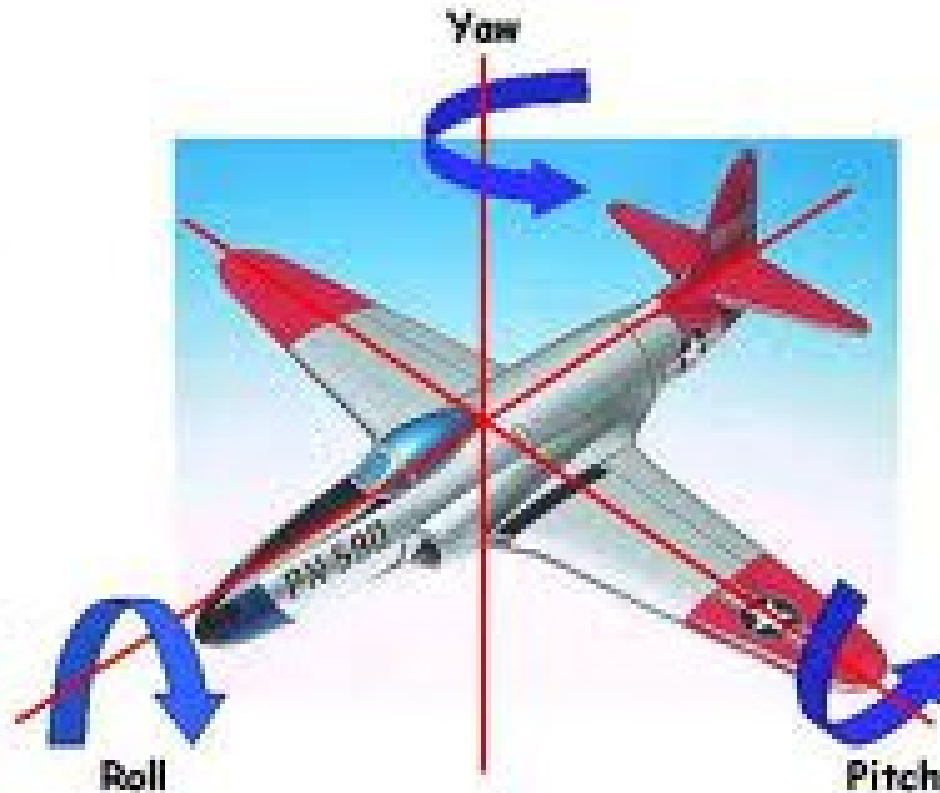
# Flight Dynamics/ Ardupilot

Teacher: Robert DeChristopher

The aircraft  
**ROLLS** around  
the longitudinal  
or fuselage axis.

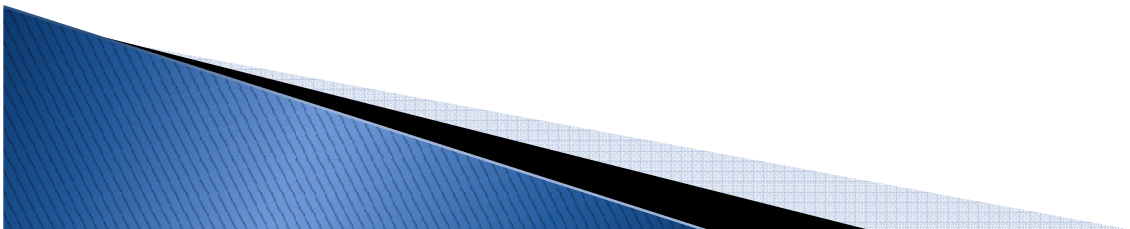
The aircraft  
**PITCHES** around  
the lateral or  
wing axis.

The aircraft  
**YAWS** around  
the vertical axis.



# Goal

- ▶ *Successfully build a user-programmable Quadcopter from scratch, and have it flying and working by the Spring of 2014*

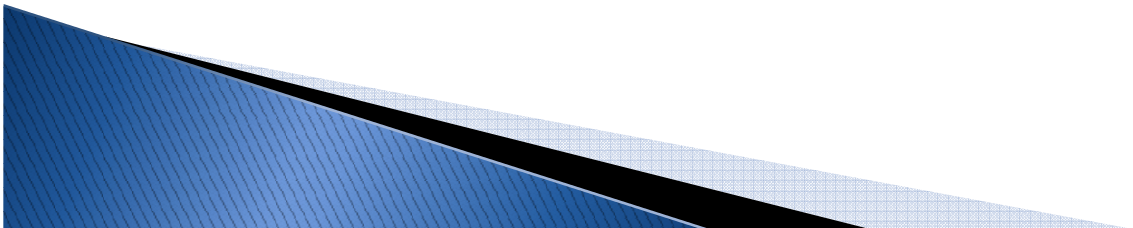


# Advising?

- ▶ Professor John Kallend







# Quick Ted Video

- ▶ <http://www.youtube.com/watch?v=w2itwFJCgFQ>

