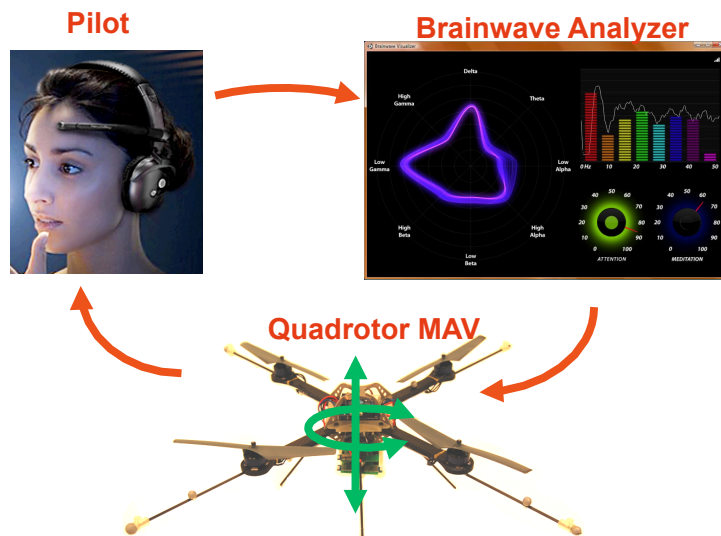


Autonomous Vehicle Laboratory



Neuro-Quad

New developments in human-machine interfaces have the potential to make the operation of robotic vehicles increasingly intuitive and effortless. The brainwave-monitoring NeuroSky headset can transform an operator's state of mind (Concentration/Relaxation) into vehicle flight commands.



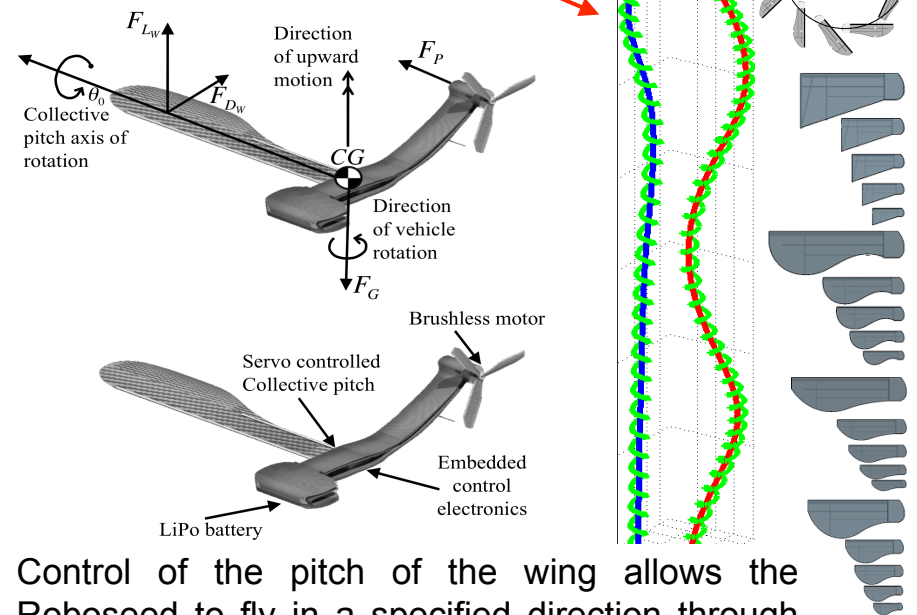
The quadrotor MAV's altitude and heading are independently controlled by the level of focus of the pilot. With further understanding of human brain waves, improved directional and navigational control may soon be possible.

Roboseed

The world's smallest mono-wing rotorcraft, inspired by the flight of a maple seed (samara), was invented at UMD. →



Precise observation of the flight of artificial samaras led to the discovery of a method to control the flight path via changes in the turn radii.



Control of the pitch of the wing allows the Roboseed to fly in a specified direction through an alternating series of large and small turn radii.

