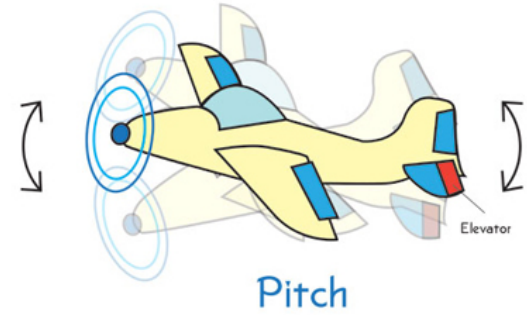
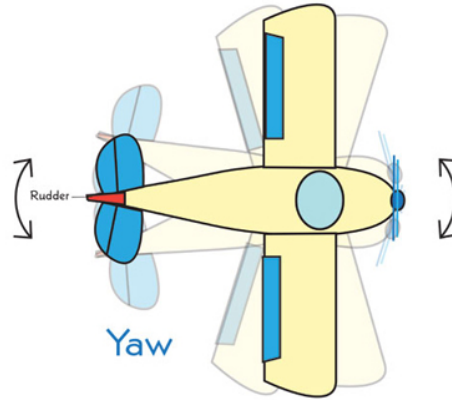
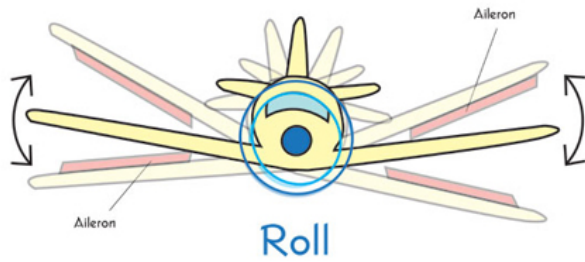


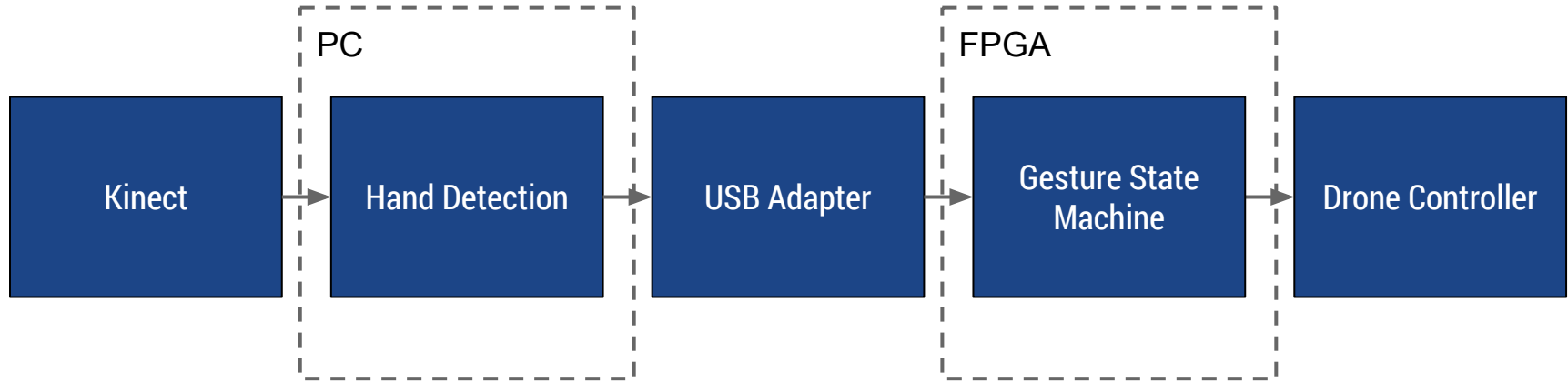
Gesture Controlled Drone

6.111 Final Project Presentation
Ben Schreck and Lee Gross

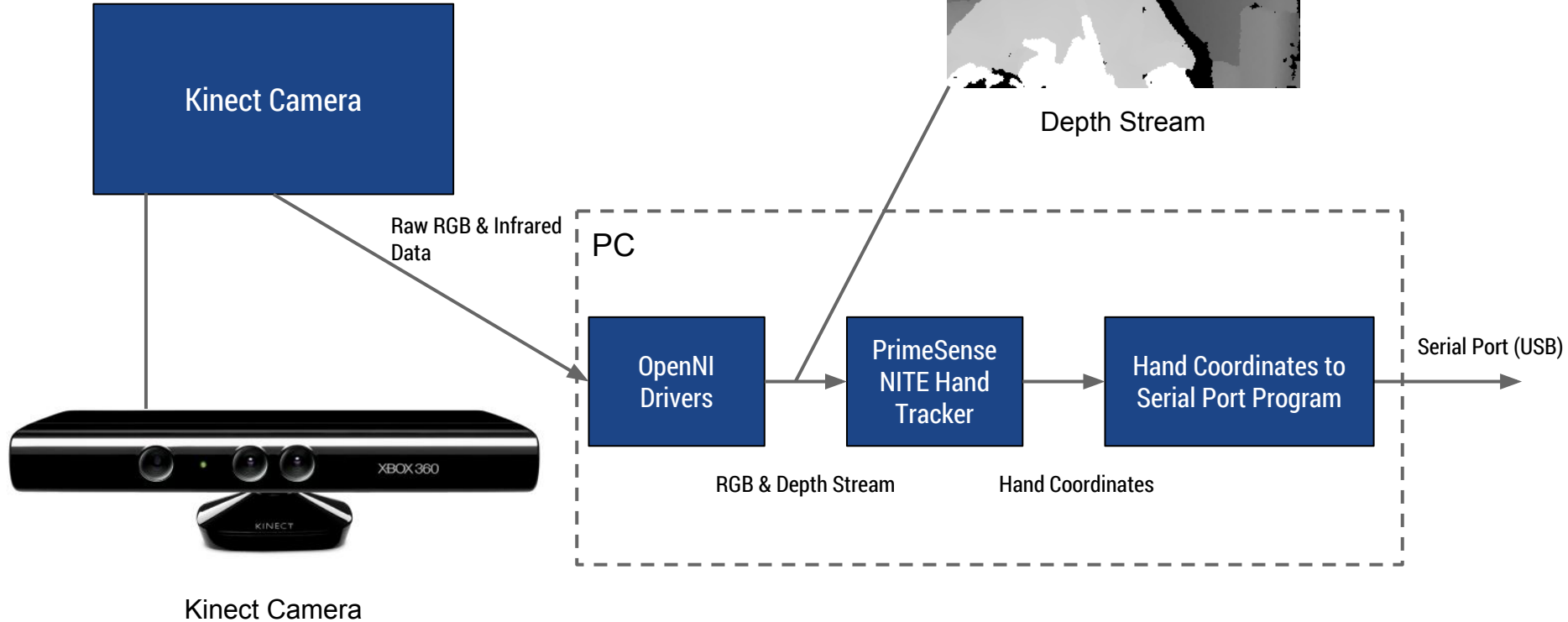
A little about UAVs



High Level System Diagram



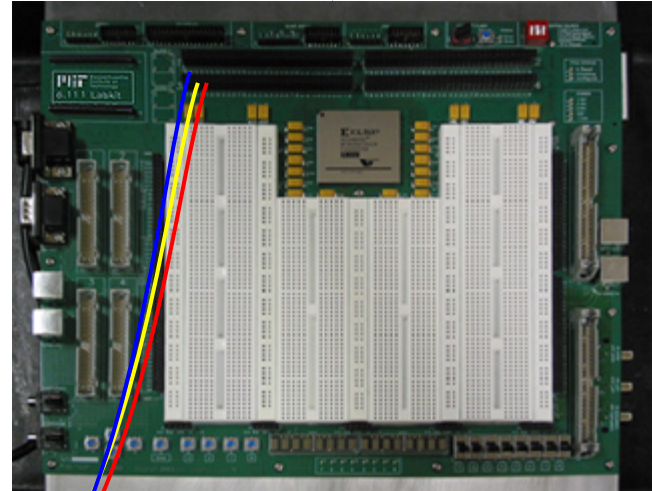
Microsoft Kinect



USB Module



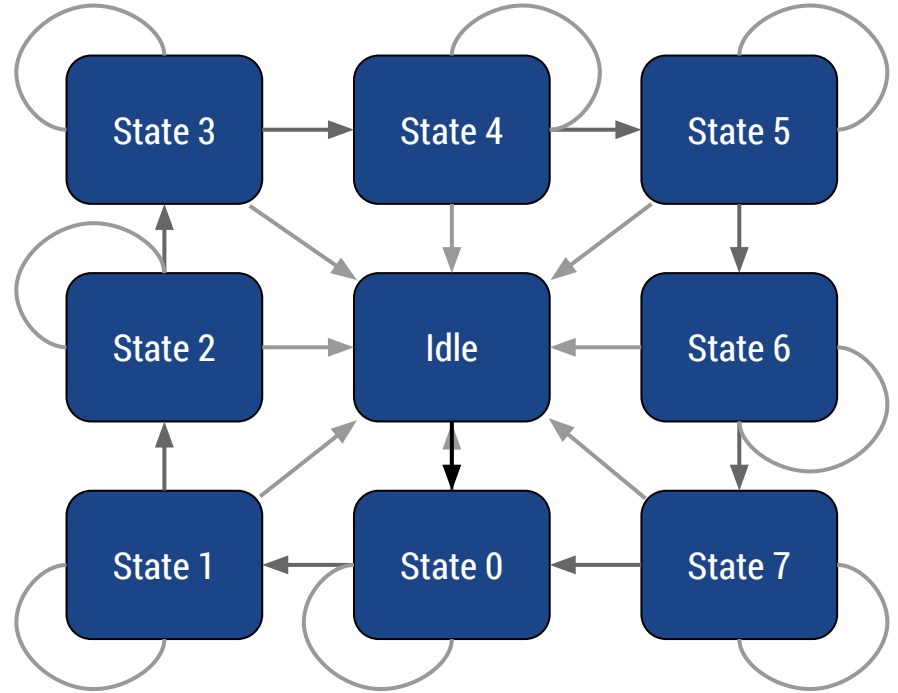
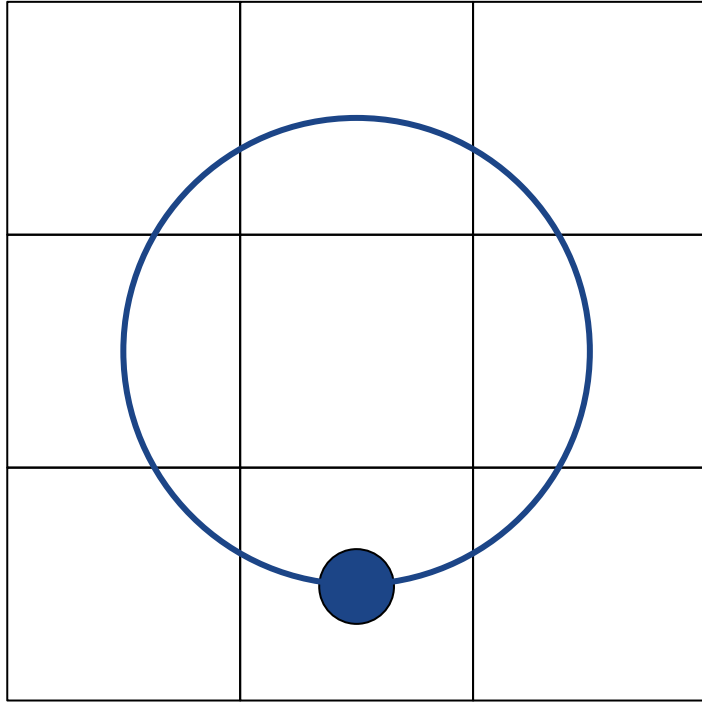
Verilog USB/Serial Module



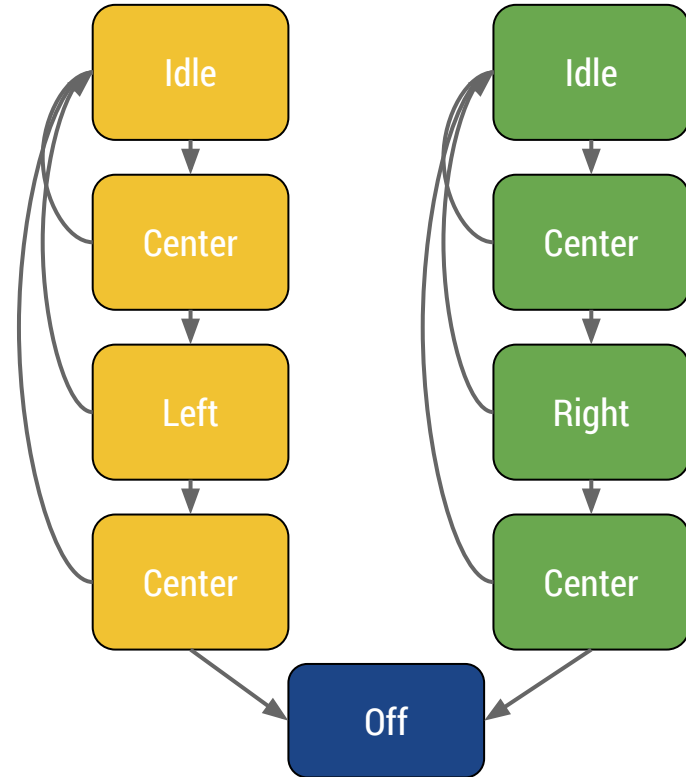
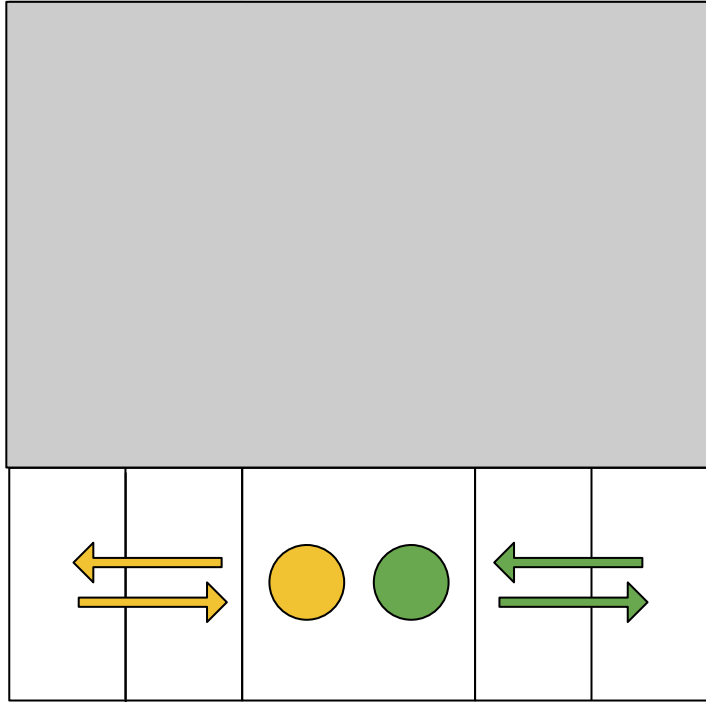
Gesture Recognition



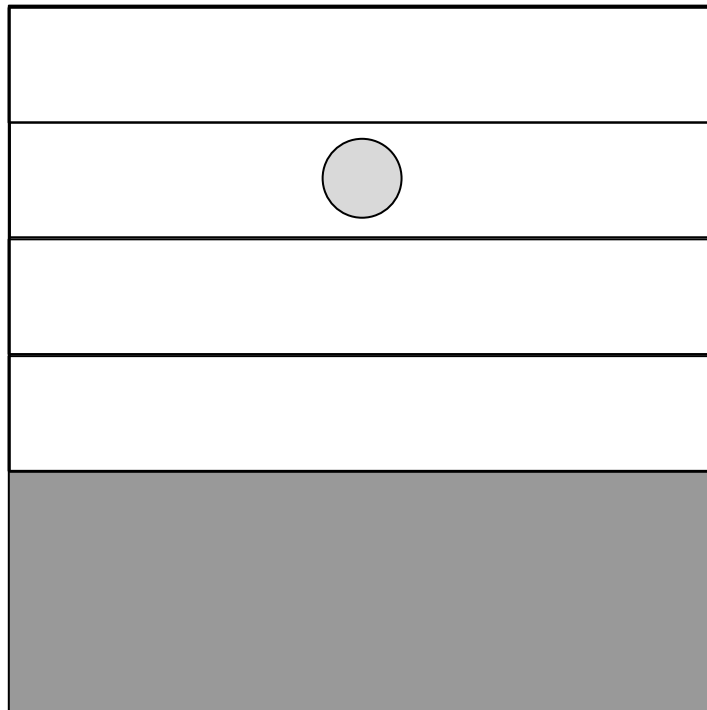
Turning Drone On



Turning Drone Off



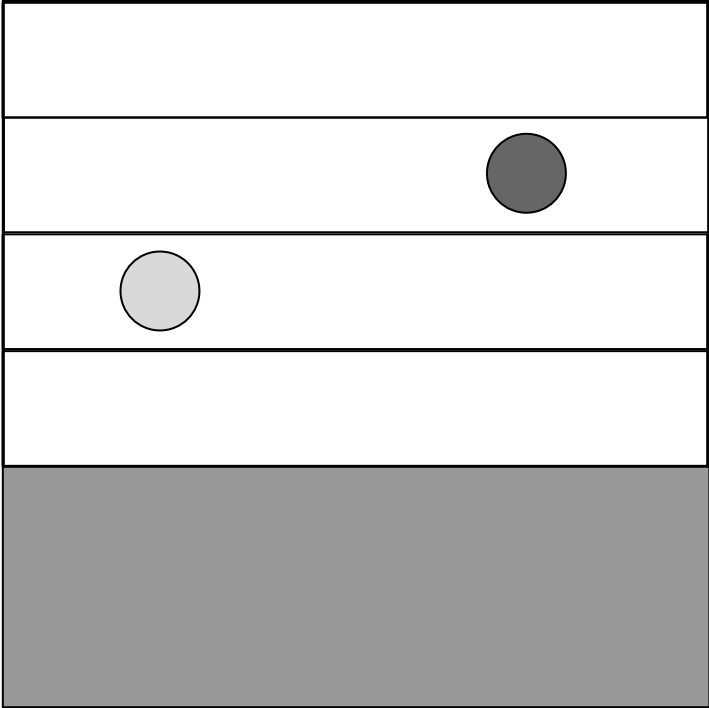
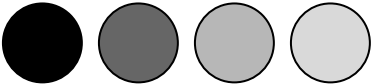
Hover



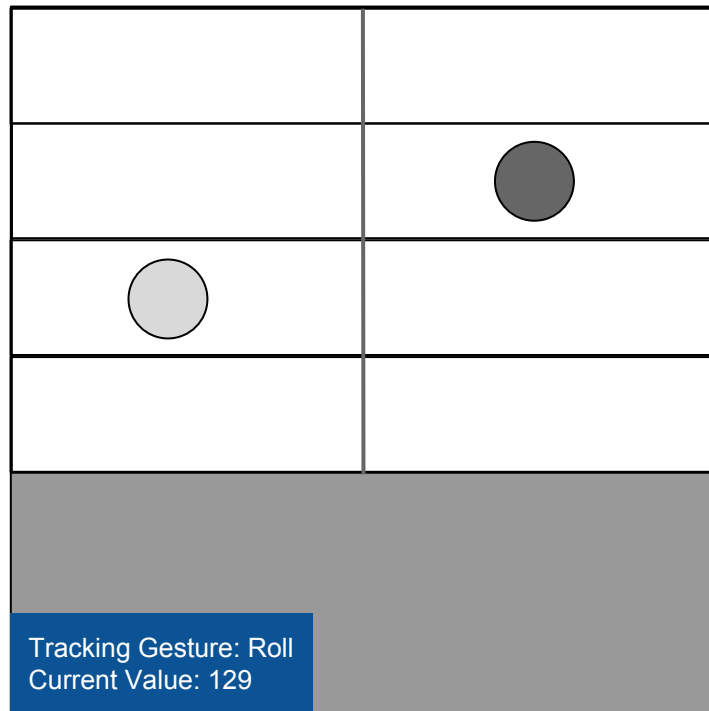
Roll

	●
●	
■	

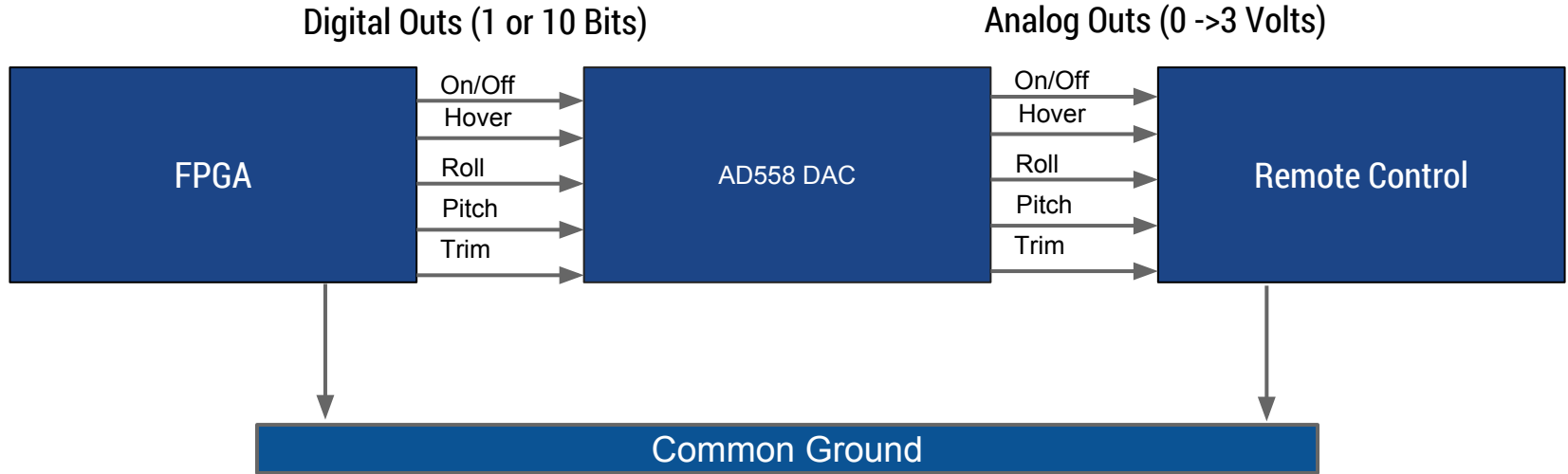
Pitch



Graphics



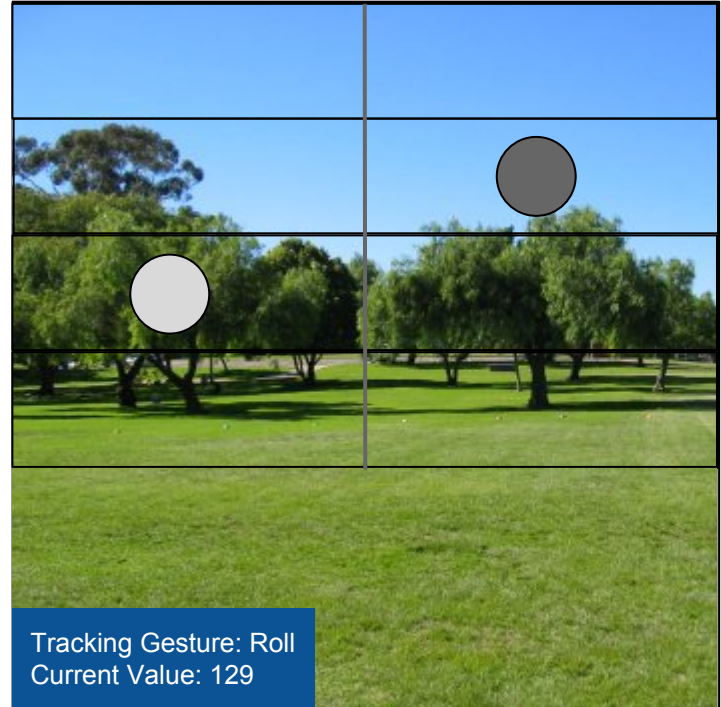
Remote Control Interface



Additional Features



**Camera & Wireless
Transmitter**



Tracking Gesture: Roll
Current Value: 129

Timeline

Kinect Input				
Drone Control Interconnect				
USB Module				
On Gesture				
Off Gesture				
Up/Down Gesture				
Roll Gesture				
Pitch Gesture				
Integration/Debug				If necessary
Graphics				If necessary
Video Feed				If time allows

Week 1: 11/10 - 11/16

Week 2: 11/17 - 11/23

Week 3: 11/24 - 11/30

Week 4: 12/1 - 12/7

Potential Issues

Integration might take longer than expected

USB module could prove challenging

It might be hard to connect leads from FPGA to Remote Controller

PC->FPGA connection might be too slow to effectively control quadcopter