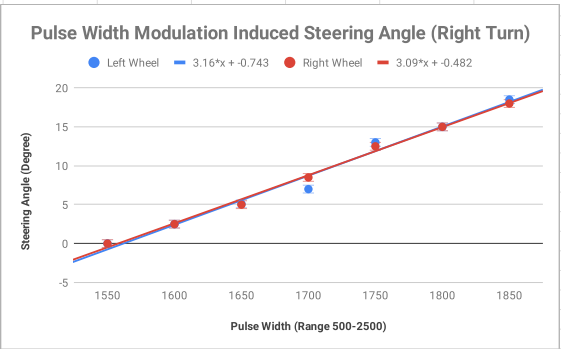
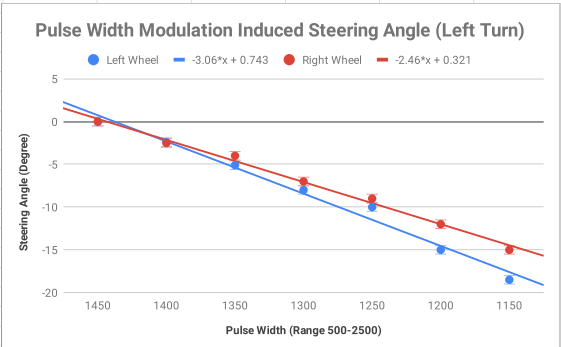
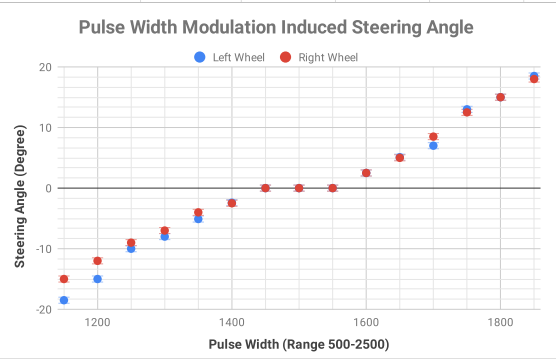
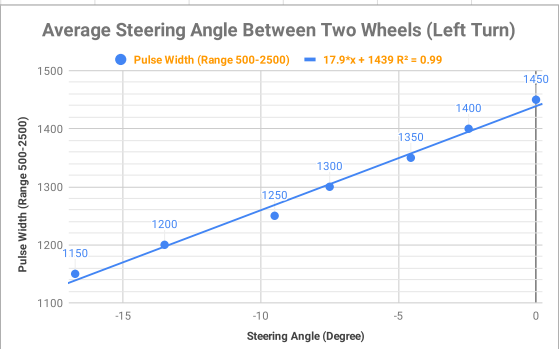


Objective: figure out the mapping function between steering angle and the pulse width signal range that is needed to turn the servo to the desire angle.

Observation: Physical Steering Range: [-18.5 - 18.5]
Safe Pulse Width Range (With buffer zone for maneuver): [1200-1800]
Max Pulse Width Range (Potential Damage to Servo): [1150 - 1850]



Pulse Width (Range 500-2500)	Trial 1		Trial 2		Trial 2		Avg b/w Trials		Avg b/w Wheels
	Left Wheel	Right Wheel	Left Wheel	Right Wheel	Left Wheel	Right Wheel	Left Wheel	Right Wheel	
1450	0	0	0	0	0	0	0	0	0
1400	-2.4	-2.5	-2.4	-2.5	-2.4	-2.5	-2.4	-2.5	-2.45
1350	-5.1	-4	-5.1	-4	-5.1	-4	-5.1	-4	-4.55
1300	-8	-7	-8	-7	-8	-7	-8	-7	-7.5
1250	-10	-9	-10	-9	-10	-9	-10	-9	-9.5
1200	-15	-12	-15	-12	-15	-12	-15	-12	-13.5
1150	-18.5	-15	-18.5	-15	-18.5	-15	-18.5	-15	-16.75
1500	0	0	0	0	0	0	0	0	0



Pulse Width (Range 500-2500)	Trial 1		Trial 2		Trial 2		Avg b/w Trials		Avg b/w Wheels
	Left Wheel	Right Wheel	Left Wheel	Right Wheel	Left Wheel	Right Wheel	Left Wheel	Right Wheel	
1550	0	0	0	0	0	0	0	0	0
1600	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1650	5.1	5	5.1	5	5.1	5	5.1	5	5.05
1700	7	8.5	7	8.5	7	8.5	7	8.5	7.75
1750	13	12.5	13	12.5	13	12.5	13	12.5	12.75
1800	15	15	15	15	15	15	15	15	15
1850	18.5	18	18.5	18	18.5	18	18.5	18	18.25
1500	0	0	0	0	0	0	0	0	0

