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## Chapter 1. BarbellSquat

### 1.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_zero_cross	std_zero_cross
<b>grav_data_Z</b>	'grav_data'	'Z'	5.000	3.600	7.371
<b>grav_data_X</b>	'grav_data'	'X'	5.000	4.100	10.975
<b>orient_data_roll</b>	'orient_data'	'roll'	5.000	5.800	9.310
<b>orient_data_yaw</b>	'orient_data'	'yaw'	5.000	6.050	11.827
<b>grav_data_Y</b>	'grav_data'	'Y'	5.000	6.450	9.932
<b>orient_data_pitch</b>	'orient_data'	'pitch'	5.000	6.450	10.272
<b>orient_data_qw</b>	'orient_data'	'qw'	5.000	6.650	11.389
<b>orient_data_qx</b>	'orient_data'	'qx'	5.000	10.600	10.609
<b>orient_data_qy</b>	'orient_data'	'qy'	5.000	10.750	10.515
<b>orient_data_qz</b>	'orient_data'	'qz'	5.000	10.900	10.508

#### 1.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_fin dpeaks	std_fin dpeaks	mean_fin dpeaks_above_zero	std_fin dpeaks_above_zero	mean_double_finds	std_double_finds	mean_z ero_cross	std_z ero_cross
<b>accel_data_Z</b>	'accel_data'	'Z'	5.000	-313.400	198.562	-205.000	121.081	-71.000	45.481	-69.000	31.319
<b>accel_data_Y</b>	'accel_data'	'Y'	5.000	-365.800	240.080	-295.400	195.238	-93.400	71.797	-58.700	40.636
<b>accel_data_X</b>	'accel_data'	'X'	5.000	-328.000	218.234	-240.200	159.962	-80.000	61.948	-48.600	37.367
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	5.000	-51.800	28.394	-39.200	24.448	-3.600	5.225	-10.200	5.020
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	5.000	-71.000	45.804	-43.800	27.599	-6.400	5.857	-10.200	5.020

<b>gyro_data_Z</b>	'gyro_data'	'Z'	5.000	-240.400	120.51	-159.200	53.877	-51.800	20.825	-27.500	25.892
					9						
<b>gyro_data_Y</b>	'gyro_data'	'Y'	5.000	-266.600	121.66	-173.600	69.071	-45.400	23.437	-20.000	15.644
					1						
<b>gyro_data_X</b>	'gyro_data'	'X'	5.000	-214.000	98.965	-155.000	60.725	-49.000	24.576	-30.800	15.135
<b>grav_data_Z</b>	'grav_data'	'Z'	5.000	-109.400	82.754	-31.200	20.620	-3.400	4.615	3.600	7.371
<b>grav_data_Y</b>	'grav_data'	'Y'	5.000	-113.800	64.670	-79.200	57.838	-13.800	14.325	6.450	9.932
<b>grav_data_X</b>	'grav_data'	'X'	5.000	-149.000	109.65	-107.400	96.756	-20.800	21.913	4.100	10.975
					4						
<b>orient_data_qz</b>	'orient_data'	'qz'	5.000	-99.600	51.564	-17.400	24.633	4.200	10.780	10.900	10.508
<b>orient_data_qy</b>	'orient_data'	'qy'	5.000	-100.000	55.353	-29.600	23.923	1.800	7.596	10.750	10.515
<b>orient_data_qx</b>	'orient_data'	'qx'	5.000	-110.200	65.370	-37.000	22.405	-2.200	6.723	10.600	10.609
<b>orient_data_qw</b>	'orient_data'	'qw'	5.000	-98.600	50.570	-32.400	21.455	0.200	7.727	6.650	11.389
<b>orient_data_roll</b>	'orient_data'	'roll'	5.000	-87.800	58.217	-22.000	8.093	-0.800	2.950	5.800	9.310
<b>orient_data_pitch</b>	'orient_data'	'pitch'	5.000	-93.400	39.259	-34.000	7.176	-2.400	3.209	6.450	10.272
<b>orient_data_yaw</b>	'orient_data'	'yaw'	5.000	-139.000	60.622	-95.000	59.678	-13.000	13.360	6.050	11.827

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## Chapter 2. BenchPress

### 2.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_zero_cross	std_zero_cross
<b>orient_data_pitch</b>	'orient_data'	'pitch'	8.000	1.375	3.433
<b>grav_data_Z</b>	'grav_data'	'Z'	8.000	1.438	9.672
<b>orient_data_qw</b>	'orient_data'	'qw'	8.000	2.062	4.911
<b>orient_data_roll</b>	'orient_data'	'roll'	8.000	2.062	11.476
<b>grav_data_X</b>	'grav_data'	'X'	8.000	2.188	11.210
<b>orient_data_qz</b>	'orient_data'	'qz'	8.000	2.531	7.496
<b>grav_data_Y</b>	'grav_data'	'Y'	8.000	4.094	4.349
<b>orient_data_qy</b>	'orient_data'	'qy'	8.000	5.375	3.891
<b>orient_data_qx</b>	'orient_data'	'qx'	8.000	8.344	3.482
<b>orient_data_yaw</b>	'orient_data'	'yaw'	8.000	8.719	7.646

#### 2.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_fi ndpeaks	std_fin dpeaks	mean_fin dpeaks_ above_zero	std_fin dpeaks_ above_zero	mean_double_fi ndpeaks	std_double_fi ndpeaks	mean_ero_cross	std_ero_cross
<b>accel_data_Z</b>	'accel_data'	'Z'	8.000	-299.500	172.475	-252.000	143.844	-84.375	53.950	-75.125	47.489
<b>accel_data_Y</b>	'accel_data'	'Y'	8.000	-313.500	197.649	-231.000	132.725	-79.250	49.187	-82.562	55.251
<b>accel_data_X</b>	'accel_data'	'X'	8.000	-301.375	176.159	-253.000	140.802	-84.875	49.090	-87.781	42.819
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	8.000	-33.750	25.432	-25.000	19.821	-1.000	6.164	-5.875	7.447
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	8.000	-64.250	52.866	-39.125	28.876	-8.000	13.544	-5.875	7.447

<b>gyro_data_Z</b>	'gyro_data'	'Z'	8.000	-251.750	139.36 8	-159.875	111.886	-37.375	30.965	-21.062	12.952
<b>gyro_data_Y</b>	'gyro_data'	'Y'	8.000	-279.250	159.56 8	-242.500	149.150	-72.000	44.523	-54.125	23.181
<b>gyro_data_X</b>	'gyro_data'	'X'	8.000	-206.500	126.24 7	-118.625	91.217	-29.625	30.951	-7.250	7.056
<b>grav_data_Z</b>	'grav_data'	'Z'	8.000	-97.375	92.876	-51.500	47.824	-6.500	10.784	1.438	9.672
<b>grav_data_Y</b>	'grav_data'	'Y'	8.000	-52.500	60.190	-5.875	12.229	2.375	5.153	4.094	4.349
<b>grav_data_X</b>	'grav_data'	'X'	8.000	-151.000	115.08 0	-76.250	48.808	-14.750	13.318	2.188	11.210
<b>orient_data_qz</b>	'orient_data'	'qz'	8.000	-131.875	80.611	-80.625	71.845	-16.250	17.839	2.531	7.496
<b>orient_data_qy</b>	'orient_data'	'qy'	8.000	-112.375	81.888	-65.250	49.531	-11.125	12.966	5.375	3.891
<b>orient_data_qx</b>	'orient_data'	'qx'	8.000	-98.875	78.277	-20.750	15.406	-1.750	5.285	8.344	3.482
<b>orient_data_qw</b>	'orient_data'	'qw'	8.000	-74.250	72.517	-53.375	56.328	-7.625	13.394	2.062	4.911
<b>orient_data_roll</b>	'orient_data'	'roll'	8.000	-162.500	115.17 4	-55.125	33.804	-6.875	11.643	2.062	11.476
<b>orient_data_pitch</b>	'orient_data'	'pitch'	8.000	-52.375	61.600	-45.375	51.230	-0.625	10.042	1.375	3.433
<b>orient_data_yaw</b>	'orient_data'	'yaw'	8.000	-132.375	79.227	-91.000	63.001	-13.250	15.554	8.719	7.646

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## Chapter 3. Deadlift

### 3.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_zero_cross	std_zero_cross
<b>orient_data_qx</b>	'orient_data'	'qx'	5.000	0.000	3.841
<b>grav_data_X</b>	'grav_data'	'X'	5.000	0.400	2.620
<b>orient_data_qz</b>	'orient_data'	'qz'	5.000	0.450	8.783
<b>orient_data_qw</b>	'orient_data'	'qw'	5.000	1.350	8.221
<b>orient_data_roll</b>	'orient_data'	'roll'	5.000	1.500	2.698
<b>orient_data_qy</b>	'orient_data'	'qy'	5.000	1.600	7.787
<b>grav_data_Y</b>	'grav_data'	'Y'	5.000	1.650	11.527
<b>orient_data_pitch</b>	'orient_data'	'pitch'	5.000	2.250	11.239
<b>grav_data_Z</b>	'grav_data'	'Z'	5.000	2.400	11.042
<b>orient_data_yaw</b>	'orient_data'	'yaw'	5.000	6.950	9.183

#### 3.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_fin dpeaks	std_fin dpeaks	mean_fin dpeaks_above_zero	std_fin dpeaks_above_zero	mean_double_fi ndpeaks	std_double_fi ndpeaks	mean_z ero_cross	std_z ero_cross
<b>accel_data_Z</b>	'accel_data'	'Z'	5.000	-416.600	143.991	-355.600	128.204	-124.400	47.805	-123.800	38.647
<b>accel_data_Y</b>	'accel_data'	'Y'	5.000	-388.400	161.992	-320.800	130.980	-107.400	47.184	-74.050	31.671
<b>accel_data_X</b>	'accel_data'	'X'	5.000	-427.400	151.695	-375.200	130.831	-126.200	46.660	-126.350	44.313
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	5.000	-59.200	25.936	-40.800	12.091	-7.200	5.070	-7.150	8.470
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	5.000	-94.600	41.247	-59.200	28.630	-14.600	9.813	-7.050	8.285

Chapter 3. Deadlift

<b>gyro_data_Z</b>	'gyro_data'	'Z'	5.000	-294.600	111.82	-173.800	63.409	-57.800	24.025	-20.950	8.152
					9						
<b>gyro_data_Y</b>	'gyro_data'	'Y'	5.000	-371.600	119.89	-312.000	98.937	-97.400	31.262	-81.000	25.673
					5						
<b>gyro_data_X</b>	'gyro_data'	'X'	5.000	-329.800	113.18	-240.400	84.583	-78.800	29.727	-38.850	25.795
					9						
<b>grav_data_Z</b>	'grav_data'	'Z'	5.000	-164.600	64.489	-71.200	54.536	-17.000	20.457	-2.400	11.042
<b>grav_data_Y</b>	'grav_data'	'Y'	5.000	-147.200	56.367	-113.400	50.168	-26.000	12.490	1.650	11.527
<b>grav_data_X</b>	'grav_data'	'X'	5.000	-123.800	50.306	-32.200	30.277	-5.400	6.580	0.400	2.620
<b>orient_data_qz</b>	'orient_dat a'	'qz'	5.000	-192.400	71.462	-65.200	66.485	-14.200	20.861	0.450	8.783
<b>orient_data_qy</b>	'orient_dat a'	'qy'	5.000	-164.200	66.807	-86.800	62.183	-14.800	15.707	1.600	7.787
<b>orient_data_qx</b>	'orient_dat a'	'qx'	5.000	-169.400	65.290	-122.600	57.951	-18.400	10.114	0.000	3.841
<b>orient_data_qw</b>	'orient_dat a'	'qw'	5.000	-203.800	72.420	-79.000	46.535	-17.200	14.307	1.350	8.221
<b>orient_data_roll</b>	'orient_dat a'	'roll'	5.000	-117.000	49.739	-86.400	47.332	-15.600	10.359	1.500	2.698
<b>orient_data_pitch</b>	'orient_dat a'	'pitch'	5.000	-135.400	51.466	-45.800	38.284	-7.600	13.520	-2.250	11.239
<b>orient_data_yaw</b>	'orient_dat a'	'yaw'	5.000	-134.200	49.932	-87.600	30.705	-25.800	12.755	-6.950	9.183

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## Chapter 4. Jogging

### 4.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_findpeaks	std_findpeaks
<b>orient_data_roll</b>	'orient_data'	'roll'	11.000	1.909	110.022
<b>orient_data_yaw</b>	'orient_data'	'yaw'	11.000	5.182	79.023
<b>orient_data_qy</b>	'orient_data'	'qy'	11.000	6.727	75.643
<b>grav_data_Y</b>	'grav_data'	'Y'	11.000	14.727	86.773
<b>orient_data_qz</b>	'orient_data'	'qz'	11.000	15.273	70.469
<b>orient_data_qx</b>	'orient_data'	'qx'	11.000	19.000	77.075
<b>orient_data_qw</b>	'orient_data'	'qw'	11.000	20.364	70.892
<b>orient_data_pitch</b>	'orient_data'	'pitch'	11.000	21.727	91.842
<b>grav_data_Z</b>	'grav_data'	'Z'	11.000	30.000	90.315
<b>grav_data_X</b>	'grav_data'	'X'	11.000	49.455	87.832

#### 4.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_findpeaks	std_findpeaks	mean_findpeaks_above_zero	std_findpeaks_above_zero	mean_double_findpeaks	std_double_findpeaks	mean_zero_cross	std_zero_cross
<b>accel_data_Z</b>	'accel_data'	'Z'	11.000	-181.091	122.635	-138.727	91.320	55.727	83.241	23.932	67.675
<b>accel_data_Y</b>	'accel_data'	'Y'	11.000	-72.182	68.444	-42.455	67.156	80.727	75.721	3.364	62.277
<b>accel_data_X</b>	'accel_data'	'X'	11.000	-191.182	105.361	-136.909	97.050	59.000	74.528	42.136	66.984
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	11.000	-3.364	82.998	14.091	89.919	111.636	87.447	91.114	89.883
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	11.000	-14.818	78.489	-2.000	79.425	97.091	88.913	91.068	89.871

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<b>gyro_data_Z</b>	'gyro_data'	'Z'	11.000	-117.27 3	126.33 2	-24.818	73.947	82.000	82.622	80.227	82.831
<b>gyro_data_Y</b>	'gyro_data'	'Y'	11.000	-131.81 8	58.964	-48.182	49.057	85.091	75.332	43.409	71.456
<b>gyro_data_X</b>	'gyro_data'	'X'	11.000	-40.091	132.20 1	9.545	113.06 5	109.091	94.957	69.136	83.391
<b>grav_data_Z</b>	'grav_data'	'Z'	11.000	30.000	90.315	60.000	79.369	130.818	98.161	102.568	87.857
<b>grav_data_Y</b>	'grav_data'	'Y'	11.000	14.727	86.773	27.909	81.055	128.182	97.474	116.955	98.642
<b>grav_data_X</b>	'grav_data'	'X'	11.000	-49.455	87.832	3.273	57.216	106.909	90.757	102.705	76.334
<b>orient_data_qz</b>	'orient_data'	'qz'	11.000	15.273	70.469	68.364	75.340	131.727	94.177	140.841	104.78 3
<b>orient_data_qy</b>	'orient_data'	'qy'	11.000	-6.727	75.643	61.091	76.060	138.273	97.351	133.568	102.75 9
<b>orient_data_qx</b>	'orient_data'	'qx'	11.000	-19.000	77.075	71.000	88.540	140.455	99.929	143.432	100.98 6
<b>orient_data_qw</b>	'orient_data'	'qw'	11.000	20.364	70.892	92.636	85.344	156.091	103.15 6	141.000	98.911
<b>orient_data_roll</b>	'orient_data'	'roll'	11.000	1.909	110.02 2	23.727	107.03 0	124.818	96.271	106.659	80.958
<b>orient_data_pitch</b>	'orient_data'	'pitch'	11.000	21.727	91.842	60.636	87.541	129.273	98.594	110.409	91.406
<b>orient_data_yaw</b>	'orient_data'	'yaw'	11.000	-5.182	79.023	62.727	85.801	134.000	95.568	118.114	96.087



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## Chapter 5. Pullups

### 5.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_zero_cross	std_zero_cross
<b>grav_data_Y</b>	'grav_data'	'Y'	10.000	0.025	1.108
<b>orient_data_qz</b>	'orient_data'	'qz'	10.000	0.125	4.831
<b>orient_data_pitch</b>	'orient_data'	'pitch'	10.000	0.275	1.083
<b>orient_data_roll</b>	'orient_data'	'roll'	10.000	0.500	6.180
<b>orient_data_qx</b>	'orient_data'	'qx'	10.000	1.350	5.950
<b>grav_data_X</b>	'grav_data'	'X'	10.000	1.675	7.266
<b>grav_data_Z</b>	'grav_data'	'Z'	10.000	2.225	4.709
<b>orient_data_qy</b>	'orient_data'	'qy'	10.000	3.125	2.470
<b>orient_data_yaw</b>	'orient_data'	'yaw'	10.000	3.325	5.359
<b>orient_data_qw</b>	'orient_data'	'qw'	10.000	4.200	2.502

#### 5.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_fi ndpeaks	std_fin dpeaks	mean_fin dpeaks_a bove_zer o	std_fin dpeaks _above _zero	mean_d ouble_fi ndpeak s	std_do uble_fi ndpea ks	mean_z ero_cro ss	std_ze ro_cro ss
<b>accel_data_Z</b>	'accel_data'	'Z'	10.000	-227.500	116.934	-197.200	99.787	-65.200	35.505	-64.975	31.274
<b>accel_data_Y</b>	'accel_data'	'Y'	10.000	-250.100	147.613	-213.300	123.834	-68.100	41.773	-61.500	30.188
<b>accel_data_X</b>	'accel_data'	'X'	10.000	-255.500	147.128	-210.400	109.756	-70.300	39.505	-67.000	33.140
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	10.000	-38.500	31.634	-23.600	21.115	-4.000	5.831	-6.625	5.259
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	10.000	-47.200	45.067	-24.500	24.181	-4.200	7.743	-6.625	5.259

Chapter 5. Pullups

<b>gyro_data_Z</b>	'gyro_data'	'Z'	10.000	-168.500	93.254	-103.300	61.121	-23.700	21.562	-10.525	5.558
<b>gyro_data_Y</b>	'gyro_data'	'Y'	10.000	-211.300	106.13	-158.800	80.535	-48.600	30.711	-37.300	14.59
					3						1
<b>gyro_data_X</b>	'gyro_data'	'X'	10.000	-165.900	89.842	-105.000	73.788	-29.800	24.229	-18.850	17.41
											7
<b>grav_data_Z</b>	'grav_data'	'Z'	10.000	-82.100	78.259	-38.900	32.126	-8.500	9.046	-2.225	4.709
<b>grav_data_Y</b>	'grav_data'	'Y'	10.000	-25.600	41.724	-19.500	35.859	1.600	8.356	0.025	1.108
<b>grav_data_X</b>	'grav_data'	'X'	10.000	-45.400	42.069	-29.700	25.281	-3.900	6.045	-1.675	7.266
<b>orient_data_qz</b>	'orient_data'	'qz'	10.000	-62.400	43.658	-33.300	26.596	-5.800	6.663	0.125	4.831
<b>orient_data_qy</b>	'orient_data'	'qy'	10.000	-38.200	37.115	-18.200	26.749	-0.500	6.205	-3.125	2.470
<b>orient_data_qx</b>	'orient_data'	'qx'	10.000	-65.800	49.315	-47.700	39.514	-9.000	8.743	1.350	5.950
<b>orient_data_qw</b>	'orient_data'	'qw'	10.000	-47.500	38.665	-21.400	24.359	-3.100	5.043	-4.200	2.502
<b>orient_data_roll</b>	'orient_data'	'roll'	10.000	-88.100	62.486	-31.200	20.547	-5.700	5.736	0.500	6.180
<b>orient_data_pitch</b>	'orient_data'	'pitch'	10.000	-23.300	38.845	-6.400	8.383	5.500	3.837	0.275	1.083
<b>orient_data_yaw</b>	'orient_data'	'yaw'	10.000	-60.700	45.957	-25.900	17.717	-1.500	3.951	3.325	5.359

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## Chapter 6. Situps

### 6.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_zero_cross	std_zero_cross
<b>orient_data_qw</b>	'orient_data'	'qw'	3.000	0.583	4.876
<b>orient_data_roll</b>	'orient_data'	'roll'	3.000	0.667	1.893
<b>orient_data_qz</b>	'orient_data'	'qz'	3.000	2.083	5.246
<b>grav_data_X</b>	'grav_data'	'X'	3.000	2.667	5.299
<b>orient_data_pitch</b>	'orient_data'	'pitch'	3.000	2.667	5.575
<b>grav_data_Y</b>	'grav_data'	'Y'	3.000	2.750	5.056
<b>orient_data_yaw</b>	'orient_data'	'yaw'	3.000	3.333	4.646
<b>orient_data_qx</b>	'orient_data'	'qx'	3.000	4.250	4.750
<b>orient_data_qy</b>	'orient_data'	'qy'	3.000	4.667	5.859
<b>grav_data_Z</b>	'grav_data'	'Z'	3.000	4.833	0.144

#### 6.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_fi ndpeaks	std_fin dpeak s	mean_fin dpeaks_a bove_zer o	std_fin dpeaks _above _zero	mean_d ouble_fi ndpeak s	std_do uble_fi ndpea ks	mean_z ero_cro ss	std_ze ro_cro ss
<b>accel_data_Z</b>	'accel_data'	'Z'	3.000	-235.000	53.675	-199.667	53.463	-64.667	18.339	-59.000	20.000
<b>accel_data_Y</b>	'accel_data'	'Y'	3.000	-250.333	71.696	-224.000	54.028	-71.333	25.325	-37.500	18.028
<b>accel_data_X</b>	'accel_data'	'X'	3.000	-229.667	41.789	-163.333	40.526	-52.000	16.823	-43.167	13.251
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	3.000	-30.000	6.000	-23.667	5.508	-4.333	3.786	-6.167	4.646
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	3.000	-57.667	34.196	-40.000	27.221	-9.000	16.462	-6.167	4.646

# Chapter 6. Situps

<b>gyro_data_Z</b>	'gyro_data'	'Z'	3.000	-139.333	48.003	-80.000	26.058	-21.000	17.321	-13.167	5.393
<b>gyro_data_Y</b>	'gyro_data'	'Y'	3.000	-232.667	50.767	-172.667	37.072	-58.000	12.288	-42.500	5.220
<b>gyro_data_X</b>	'gyro_data'	'X'	3.000	-169.667	45.654	-92.667	28.308	-28.667	17.786	-21.000	7.937
<b>grav_data_Z</b>	'grav_data'	'Z'	3.000	-82.667	40.129	-28.667	23.861	-9.000	10.817	-4.833	0.144
<b>grav_data_Y</b>	'grav_data'	'Y'	3.000	-24.667	22.502	-7.000	12.124	2.667	9.504	-2.750	5.056
<b>grav_data_X</b>	'grav_data'	'X'	3.000	-47.333	19.732	-44.000	14.000	-5.000	10.440	2.667	5.299
<b>orient_data_qz</b>	'orient_data'	'qz'	3.000	-25.000	23.388	-19.333	13.577	2.000	11.358	-2.083	5.246
<b>orient_data_qy</b>	'orient_data'	'qy'	3.000	-71.667	32.578	-20.000	17.692	-7.333	6.658	-4.667	5.859
<b>orient_data_qx</b>	'orient_data'	'qx'	3.000	-31.333	23.629	-6.333	10.970	1.000	8.000	-4.250	4.750
<b>orient_data_qw</b>	'orient_data'	'qw'	3.000	-86.667	45.545	-62.667	25.658	-13.000	13.000	-0.583	4.876
<b>orient_data_roll</b>	'orient_data'	'roll'	3.000	-91.667	37.541	-29.000	17.059	-9.667	8.083	-0.667	1.893
<b>orient_data_pitch</b>	'orient_data'	'pitch'	3.000	-24.333	21.733	-20.333	14.978	2.667	11.060	-2.667	5.575
<b>orient_data_yaw</b>	'orient_data'	'yaw'	3.000	-86.667	22.942	-21.333	15.275	-4.000	3.000	3.333	4.646

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## Chapter 7. UofC

### 7.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_zero_cross	std_zero_cross
<b>orient_data_yaw</b>	'orient_data'	'yaw'	2.000	4.125	4.773
<b>orient_data_roll</b>	'orient_data'	'roll'	2.000	7.625	6.187
<b>orient_data_qx</b>	'orient_data'	'qx'	2.000	9.500	4.243
<b>grav_data_X</b>	'grav_data'	'X'	2.000	11.250	11.314
<b>grav_data_Z</b>	'grav_data'	'Z'	2.000	11.250	13.435
<b>orient_data_qy</b>	'orient_data'	'qy'	2.000	12.625	0.530
<b>grav_data_Y</b>	'grav_data'	'Y'	2.000	13.500	0.000
<b>orient_data_qw</b>	'orient_data'	'qw'	2.000	14.500	0.354
<b>orient_data_qz</b>	'orient_data'	'qz'	2.000	16.250	6.010
<b>orient_data_pitch</b>	'orient_data'	'pitch'	2.000	21.625	9.016

#### 7.1.1. Average Error Axis of Sensor

	Sensor	Axis	GroupCount	mean_fin_dpeaks	std_fin_dpeaks	mean_fin_dpeaks_above_zero	std_fin_dpeaks_above_zero	mean_double_finds	std_double_finds	mean_zero_cross	std_zero_cross
<b>accel_data_Z</b>	'accel_data'	'Z'	2.000	-496.000	135.765	-390.500	129.401	-158.000	45.255	-99.750	16.617
<b>accel_data_Y</b>	'accel_data'	'Y'	2.000	-507.000	149.907	-322.000	82.024	-123.500	27.577	-122.750	8.132
<b>accel_data_X</b>	'accel_data'	'X'	2.000	-527.000	130.108	-427.000	72.125	-154.500	31.820	-149.500	7.071
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	2.000	-70.500	34.648	-49.000	21.213	-23.500	12.021	-23.375	11.844

<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	2.000	-98.000	62.225	-64.500	47.376	-29.000	19.799	-23.375	11.844
<b>gyro_data_Z</b>	'gyro_data'	'Z'	2.000	-320.500	194.454	-208.500	159.099	-62.500	48.790	-31.000	14.142
<b>gyro_data_Y</b>	'gyro_data'	'Y'	2.000	-408.000	234.759	-376.000	216.375	-120.000	67.882	-64.250	16.617
<b>gyro_data_X</b>	'gyro_data'	'X'	2.000	-246.500	163.342	-165.500	122.329	-60.500	45.962	-21.000	8.485
<b>grav_data_Z</b>	'grav_data'	'Z'	2.000	-182.500	111.016	-108.000	50.912	-38.000	14.142	-11.250	13.435
<b>grav_data_Y</b>	'grav_data'	'Y'	2.000	-115.500	78.489	-28.500	17.678	-22.500	10.607	-13.500	0.000
<b>grav_data_X</b>	'grav_data'	'X'	2.000	-221.000	137.179	-103.500	54.447	-42.500	20.506	-11.250	11.314
<b>orient_data_qz</b>	'orient_data'	'qz'	2.000	-185.500	111.016	-162.500	88.388	-49.500	26.163	-16.250	6.010
<b>orient_data_qy</b>	'orient_data'	'qy'	2.000	-186.500	109.602	-82.000	72.125	-32.000	21.213	-12.625	0.530
<b>orient_data_qx</b>	'orient_data'	'qx'	2.000	-162.500	94.045	-53.000	33.941	-26.000	14.142	-9.500	4.243
<b>orient_data_qw</b>	'orient_data'	'qw'	2.000	-143.500	92.631	-99.000	48.083	-34.500	17.678	-14.500	0.354
<b>orient_data_roll</b>	'orient_data'	'roll'	2.000	-282.500	154.856	-65.000	46.669	-22.000	18.385	-7.625	6.187
<b>orient_data_pitch</b>	'orient_data'	'pitch'	2.000	-112.500	81.317	-101.500	67.175	-27.500	16.263	-21.625	9.016
<b>orient_data_yaw</b>	'orient_data'	'yaw'	2.000	-192.000	115.966	-149.000	128.693	-46.500	31.820	-4.125	4.773

## Chapter 8. Walking

### 8.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_double_findpeaks	std_double_findpeaks
<b>orient_data_qz</b>	'orient_data'	'qz'	17.000	58.176	228.161
<b>orient_data_qw</b>	'orient_data'	'qw'	17.000	75.235	262.609
<b>orient_data_qy</b>	'orient_data'	'qy'	17.000	120.882	280.300
<b>orient_data_qx</b>	'orient_data'	'qx'	17.000	145.000	308.977
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	17.000	147.235	302.970
<b>orient_data_yaw</b>	'orient_data'	'yaw'	17.000	194.294	378.436
<b>orient_data_roll</b>	'orient_data'	'roll'	17.000	204.353	370.752
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	17.000	213.353	360.387
<b>orient_data_pitch</b>	'orient_data'	'pitch'	17.000	222.353	384.970

#### 8.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_findpeaks	std_findpeaks	mean_double_findpeaks_above_zero	std_double_findpeaks_above_zero	mean_double_findpeaks	std_double_findpeaks	mean_zero_crossings	std_zero_crossings
<b>accel_data_Z</b>	'accel_data'	'Z'	17.000	-2283.412	2064.318	-1715.647	1683.041	-684.294	731.653	-750.956	832.908
<b>accel_data_Y</b>	'accel_data'	'Y'	17.000	-1618.706	1500.318	-1448.235	1388.102	-563.471	639.877	-851.059	890.349
<b>accel_data_X</b>	'accel_data'	'X'	17.000	-1953.941	1763.842	-1412.824	1265.112	-495.941	567.736	-634.000	679.678
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	17.000	-730.882	841.121	-434.000	546.842	-147.235	302.970	-254.971	366.353

# Chapter 8. Walking

<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	17.000	-820.000	875.849	-587.471	638.956	-213.353	360.387	-254.853	366.251
<b>gyro_data_Z</b>	'gyro_data'	'Z'	17.000	-1689.882	1644.329	-1183.294	1243.344	-431.471	560.077	-410.412	519.141
<b>gyro_data_Y</b>	'gyro_data'	'Y'	17.000	-2021.765	1867.141	-1506.706	1491.531	-489.941	587.799	-648.676	733.069
<b>gyro_data_X</b>	'gyro_data'	'X'	17.000	-1903.000	1795.577	-1481.176	1453.050	-565.824	684.859	-583.426	702.226
<b>grav_data_Z</b>	'grav_data'	'Z'	17.000	-979.059	1033.259	-606.824	715.673	-258.647	417.555	-153.853	352.707
<b>grav_data_Y</b>	'grav_data'	'Y'	17.000	-909.882	997.843	-840.176	939.993	-245.941	400.136	-24.809	217.874
<b>grav_data_X</b>	'grav_data'	'X'	17.000	-645.882	818.694	-486.118	619.126	-115.412	296.242	-196.926	327.858
<b>orient_data_qz</b>	'orient_data'	'qz'	17.000	-735.353	850.271	-331.588	470.206	-58.176	228.161	-13.735	194.733
<b>orient_data_qy</b>	'orient_data'	'qy'	17.000	-1140.059	1159.591	-509.000	603.212	-120.882	280.300	4.235	187.425
<b>orient_data_qx</b>	'orient_data'	'qx'	17.000	-1218.824	1225.626	-591.824	680.741	-145.000	308.977	24.279	164.730
<b>orient_data_qw</b>	'orient_data'	'qw'	17.000	-709.412	838.905	-382.235	523.629	-75.235	262.609	-3.235	184.008
<b>orient_data_roll</b>	'orient_data'	'roll'	17.000	-914.882	1020.099	-512.471	651.639	-204.353	370.752	-185.279	347.379
<b>orient_data_pitch</b>	'orient_data'	'pitch'	17.000	-878.647	998.788	-478.412	614.695	-222.353	384.970	-183.926	365.519
<b>orient_data_yaw</b>	'orient_data'	'yaw'	17.000	-979.529	1107.036	-592.941	748.864	-194.294	378.436	-172.559	357.405



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## Chapter 9. WalkingOnTreadmill

### 9.1. Average Error by Sensor

	Sensor	Axis	GroupCount	mean_findpeaks_above_zero	std_findpeaks_above_zero
<b>grav_data_Y</b>	'grav_data'	'Y'	4.000	1.500	17.521
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	4.000	2.000	23.310
<b>grav_data_Z</b>	'grav_data'	'Z'	4.000	33.250	21.639
<b>grav_data_X</b>	'grav_data'	'X'	4.000	36.250	19.190
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	4.000	38.250	7.136

#### 9.1.1. Average Error Axis of Sensor

	Sensor	Axis	Group Count	mean_findpeaks	std_findpeaks	mean_findpeaks_above_zero	std_findpeaks_above_zero	mean_double_findpeaks	std_double_findpeaks	mean_zero_cross	std_zero_cross
<b>accel_data_Z</b>	'accel_data'	'Z'	4.000	-233.000	64.389	-156.750	61.059	-12.500	20.535	-6.188	11.426
<b>accel_data_Y</b>	'accel_data'	'Y'	4.000	-209.250	65.795	-108.000	44.362	-10.750	16.520	-10.750	15.740
<b>accel_data_X</b>	'accel_data'	'X'	4.000	-212.250	72.274	-110.250	66.700	24.000	26.721	2.875	8.797
<b>bar_data_Relative Altitude</b>	'bar_data'	'Relative Altitude'	4.000	18.000	12.247	38.250	7.136	70.500	4.509	51.312	1.599
<b>bar_data_Pressure</b>	'bar_data'	'Pressure'	4.000	-17.750	27.813	-2.000	23.310	57.250	8.539	51.438	1.420
<b>gyro_data_Z</b>	'gyro_data'	'Z'	4.000	-102.750	53.068	-32.500	38.957	44.000	14.213	47.312	9.308
<b>gyro_data_Y</b>	'gyro_data'	'Y'	4.000	-119.750	68.806	-46.250	58.002	42.500	16.783	43.812	6.644
<b>gyro_data_X</b>	'gyro_data'	'X'	4.000	-112.500	45.022	-58.750	37.898	43.750	13.226	41.688	2.968
<b>grav_data_Z</b>	'grav_data'	'Z'	4.000	-38.250	28.883	33.250	21.639	64.000	17.340	78.250	14.059
<b>grav_data_Y</b>	'grav_data'	'Y'	4.000	-23.250	25.038	1.500	17.521	59.500	4.509	67.250	21.406
<b>grav_data_X</b>	'grav_data'	'X'	4.000	1.750	29.010	36.250	19.190	71.750	8.057	64.312	8.994

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<b>orient_data_qz</b>	'orient_data_qz'	'qz'	4.000	13.250	34.072	34.250	19.805	78.000	5.944	70.750	18.625
<b>orient_data_qy</b>	'orient_data_qy'	'qy'	4.000	-27.000	41.255	14.000	27.092	63.500	9.950	73.250	12.621
<b>orient_data_qx</b>	'orient_data_qx'	'qx'	4.000	-10.750	23.726	9.500	18.267	68.000	2.828	76.125	14.539
<b>orient_data_qw</b>	'orient_data_qw'	'qw'	4.000	-3.500	49.406	11.000	48.915	71.000	14.900	76.875	14.511
<b>orient_data_roll</b>	'orient_data_roll'	'roll'	4.000	8.250	28.052	38.250	11.087	72.250	8.057	70.750	3.582
<b>orient_data_pitch</b>	'orient_data_pitch'	'pitch'	4.000	-8.000	24.833	45.500	15.416	74.750	11.758	70.750	17.693
<b>orient_data_yaw</b>	'orient_data_yaw'	'yaw'	4.000	27.250	28.336	45.750	7.320	81.500	3.109	70.500	15.398

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