



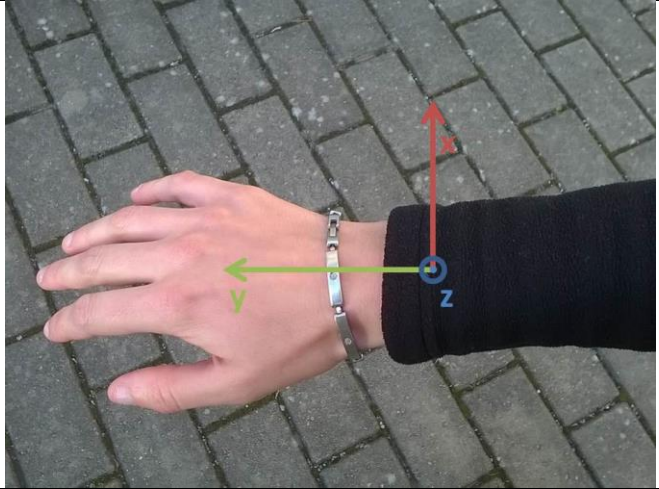
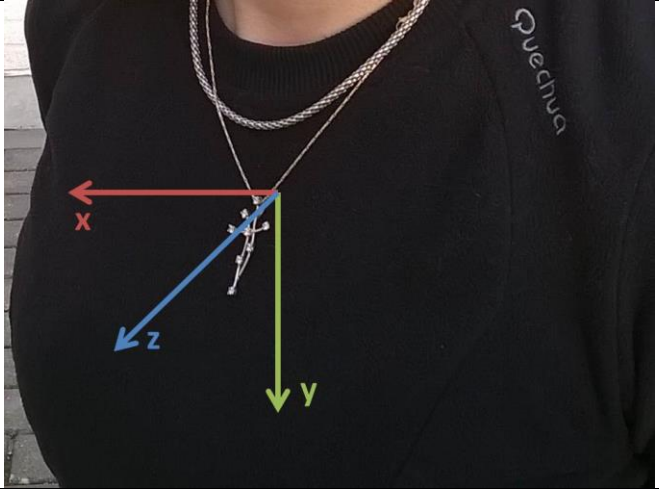
MOTION

Slow walk	Normal walk	Run
Average frequency: 25 steps/min	Average frequency: 50 steps/min	Average frequency: 75 steps/min
		
Slow crawl	Fast crawl	Slither
Average frequency: 20 steps/min	Average frequency: 40 steps/min	Average frequency: 18 steps/min
		

PATH TYPE

<div><div>Straight line L</div><div>Path total length: 40.32 m</div><div></div></div>	<div><div>Square L</div><div>Path total length: 113.64 m</div><div></div></div>	<div><div>Zig-zag L</div><div>Path total length: 59.7417 m</div><div></div></div>
<div><div>Straight line S</div><div>Path total length: 18.32 m</div><div></div></div>	<div><div>Square S</div><div>Path total length: 47.64 m</div><div></div></div>	<div><div>Zig-zag S</div><div>Path total length: 28.7693 m</div><div></div></div>
<div><div>Straight line XS</div><div>Path total length: 7.32 m</div><div></div></div>	<div><div>Square XS</div><div>Path total length: 20.14 m</div><div></div></div>	<div><div>Zig-zag XS</div><div>Path total length: 16.9342 m</div><div></div></div>

SENSOR PLACEMENT

Foot	Waist
	
<ul style="list-style-type: none"> • x axis directed toward the right foot • y axis directed toward the ground • z axis directed forward 	<ul style="list-style-type: none"> • x axis directed toward the right thigh • y axis directed toward the ground • z axis directed forward
Wrist	Chest
	
<ul style="list-style-type: none"> • x axis directed opposite of the left hand • y axis directed toward the middle finger • z axis perpendicular to the hand plane 	<ul style="list-style-type: none"> • x axis directed toward the right arm • y axis directed toward the ground • z axis directed forward

DATASET

Activity	Metronome settings	Sensor placement	Path type	# steps	Trial ID
Slow walk	50 beats = 25 steps per minute	Foot	Straight line L	39	T01
			Square L	105	T02
			Zig-zag L	56	T03
		Waist	Straight line L	38	T04
			Square L	107	T05
			Zig-zag L	55	T06
		Wrist	Straight line L	34	T07
			Square L	95	T08
			Zig-zag L	50	T09
		Chest	Straight line L	36	T10
			Square L	94	T11
			Zig-zag L	48	T12
		Foot	Straight line L	31	T13
			Square L	83	T14
			Zig-zag L	42	T15
Normal walk	100 beats = 50 steps per minute	Waist	Straight line L	30	T16
			Square L	80	T17
			Zig-zag L	42	T18
		Wrist	Straight line L	30	T19
			Square L	81	T20
			Zig-zag L	42	T21
		Chest	Straight line L	30	T22
			Square L	80	T23
			Zig-zag L	43	T24
		Foot	Straight line L	25	T25
			Square L	68	T26
			Zig-zag L	34	T27
		Waist	Straight line L	24	T28
			Square L	65	T29
			Zig-zag L	35	T30
Run	150 beats = 75 steps per minute	Wrist	Straight line L	22	T31
			Square L	63	T32
			Zig-zag L	34	T33
		Chest	Straight line L	23	T34
			Square L	61	T35
			Zig-zag L	32	T36

Activity	Metronome settings	Sensor placement	Path type	# steps	Trial ID
Slow crawl	40 beats = 20 steps per minute	Foot	Straight line S	27	T37
			Square S	65	T38
			Zig-zag S	36	T39
		Waist	Straight line S	23	T40
			Square S	57	T41
			Zig-zag S	33	T42
		Wrist	Straight line S	22	T43
			Square S	56	T44
			Zig-zag S	32	T45
		Chest	Straight line S	24	T46
			Square S	56	T47
			Zig-zag S	33	T48
		Foot	Straight line S	24	T49
			Square S	62	T50
			Zig-zag S	36	T51
Fast crawl	80 beats = 40 steps per minute	Waist	Straight line S	23	T52
			Square S	60	T53
			Zig-zag S	36	T54
		Wrist	Straight line S	24	T55
			Square S	61	T56
			Zig-zag S	35	T57
		Chest	Straight line S	24	T58
			Square S	60	T59
			Zig-zag S	36	T60
		Foot	Straight line XS	9	T61
			Square XS	20	T62
			Zig-zag XS	13	T63
		Waist	Straight line XS	8	T64
			Square XS	22	T65
			Zig-zag XS	16	T66
Slither	36 beats = 18 steps per minute	Wrist	Straight line XS	12	T67
			Square XS	25	T68
			Zig-zag XS	17	T69
		Chest	Straight line XS	10	T70
			Square XS	24	T71
			Zig-zag XS	17	T72