

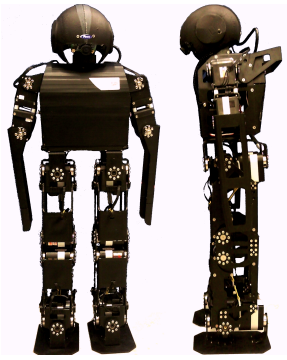
Robo-Erectus Jr-2010 KidSize Team Description Paper.

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Physical Specifications of the REJr-2010.

1. Physical Specifications.					
Weight	Dimensions			Speed	
	Height	Width	Depth	Walking	Running
4.3kg	560mm	220mm	160mm	25cm/sec	40cm/sec
2. List of Degrees of Freedom.					
Joint	Roll	Pitch	Yaw		
Head		✓	✓		
Shoulder	✓	✓			
Elbow		✓			
Hip	✓	✓	✓		
Knee		✓			
Ankle	✓	✓			
3. Sensors.					
Sensor	Details				
Camera	640x480 Resolution 30fps.				
Gyro (IMU)	$\pm 500^\circ/sec$ angular rate.				
Accelerometer(IMU)	$\pm 3g$				
Rate Gyro	$\pm 300^\circ/sec$ angular rate				
4. Actuators.					
Actuator	Torque			Speed	
Upper Body	40.8 kg.cm @ 10.8v			0.19 sec / 60 deg @ 10.8v	
Lower Body	67.0 kg.cm @ 11.1v			0.22 sec / 60 deg @ 11.1v	
5. Specifications of the boards.					
Features	High Level Host Processor		Low Level Micro-processor		
Processor	Gumstix		dsPIC		
Speed	600Mhz		30Mhz		