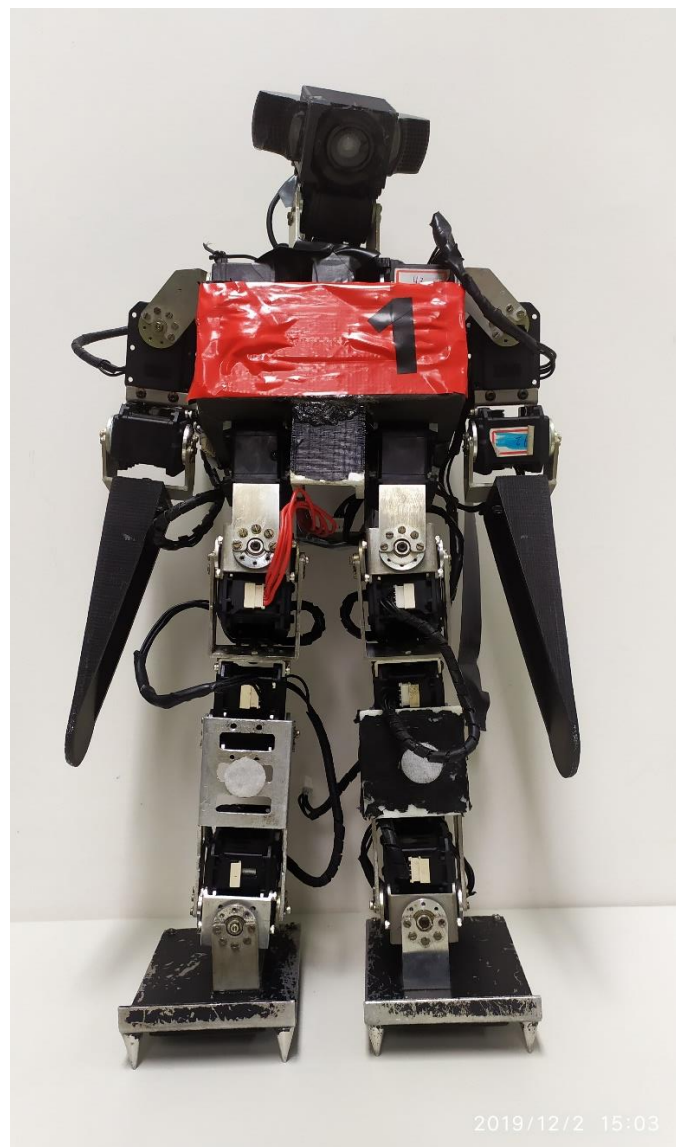
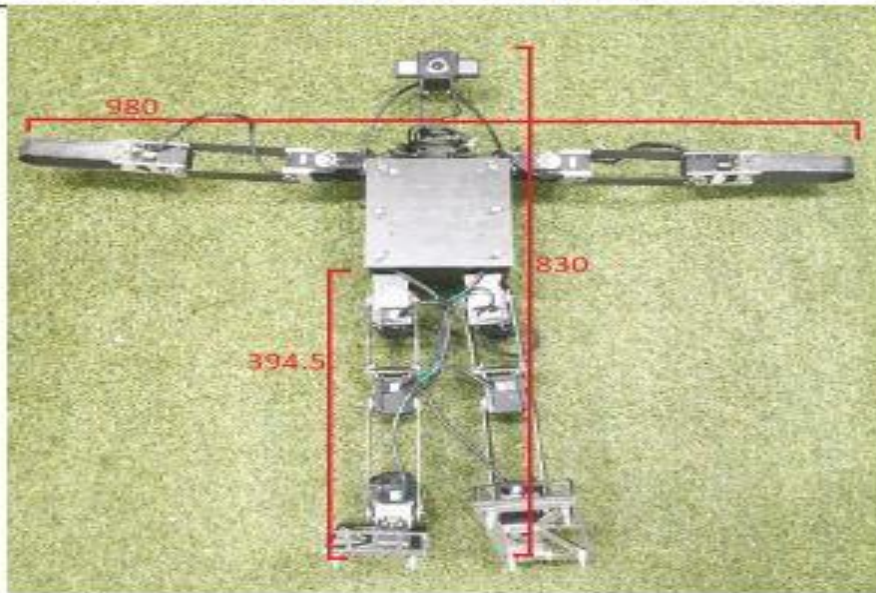


RoboFEI-HT - 2019 Robot Specification



Robot Name	B1
Height	490 mm
Weight	3.0 Kg
Walking Speed	10 cm/s
Degrees of Freedom	20 in total: 6 DOF per leg, 3 DOF per arm , 2 DOF on the head,
Type of motors	Dynamixel RX-28
Sensors	UM7 Ultra-Miniature Orientation Sensor
Camera	Logitech HD Pro Webcam C920 (Full HD – 1920x1080)
Computing Unit	Intel NUC
	Intel NUC i5-4250U, 8GB DDR3 SDRAM, 120GB SDD
	WLAN – 802.11b/g/n
Operating System	Linux Ubuntu 14.04
Battery	Lipo 2000mAh

ROBOT PICTURE



ROBOT DIMENSIONS

Max Height	830 mm
Max Width	980 mm
Leg Length	394.5 mm
Weight	5.9 Kg
Skeleton Materials	Plastic, Aluminium and Carbon Fiber
Walking speed	40 cm/s
DOF	19 in total: 6 per leg, 3 per arm, 1 in the neck
Type of motors	Dynamixel MX-106, MX-64, XM430
Motors com protocol	RS-485
IMU Sensor	CH Robotics UM6
Camera	Genius WideCam F100
Computing unit	Intel NUC Core i5, 8GB SDRAM 120GB SSD
Battery	LiPo 14.8V - 3300mAh

INTERNAL SENSOR

Compass	For orientation
Acelerometer	To detect falls
Gyroscope	To control the robot balance
Conversor USB/RS485	To communicate with the motors

EXTERNAL SENSOR

Single Camera	For detection of the arena to run.
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