

# 1 Robot Specification

Figure.1 is our **prototype** robot design. **This robot is not completed yet.** We **plan to upgrade** the hardware lighter and more robust. You can find more detail from the spec. table 1 at the next page.

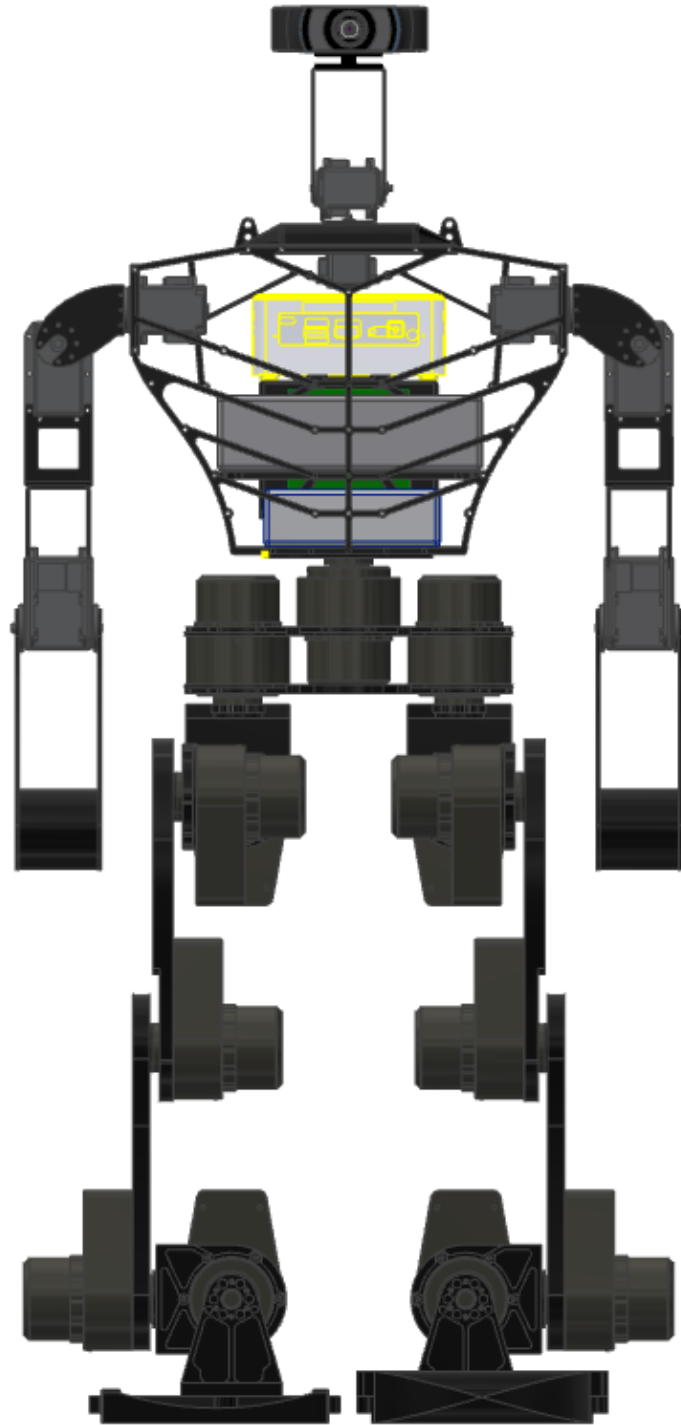


Figure.1 Unfinished Robot

<b>NAME</b>	<b>RO:BIT</b>	
<b>SIZE</b>	Weight Height	12.0 kg 860.0 mm
<b>Number of degrees of freedom</b>	All of DOF HEAD LEG ARM	21 DOF 2 DOF 12 DOF 6 DOF
<b>Actuators</b>	ROBOTIS Dynamixel (MX-28, MX-64, and MX-106) ALM DRIVE	
<b>Type of motors, Speed</b>	MX-106	45 RPM
	MX-64	63 RPM
	MX-28	55 RPM
	ALM DRIVE	26 RPM
<b>Computing units</b>	NUC7i7BNH, Intel i7-7567U Dual Core 3.5GHz, 4GB DDR4 RAM and 120GB of SSD  ARM Cortex M4 STM32F446RE MCU 180MHz	
<b>Camera</b>	C920R Logitech	
<b>Sensors</b>	MW-AHRSv1	
<b>Walking speed</b>	25 cm/s	
<b>Battery</b>	Li-Po 4Cell 2200mAh and Li-Po 8Cell 8000mAh	
<b>OS/Development Platform</b>	Linux Ubuntu 16.04/C,C++/ROS	

**Table 1 Specification of the Robot**