

# 1 Robot Specification

Figure.1 is our **prototype** robot design. We **plan to upgrade** the hardware lighter and more robust. You can find more detail from the spec.

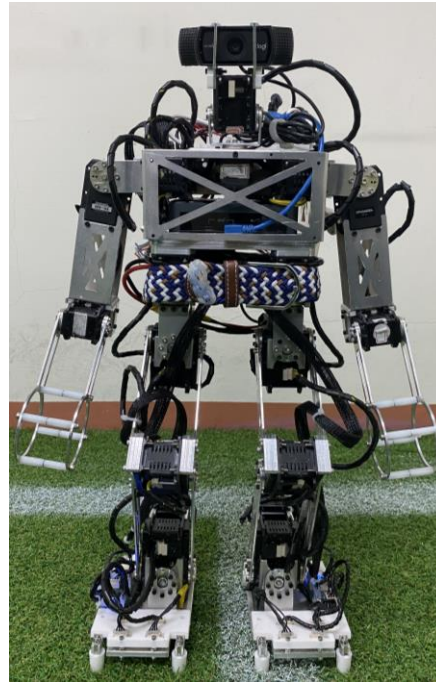
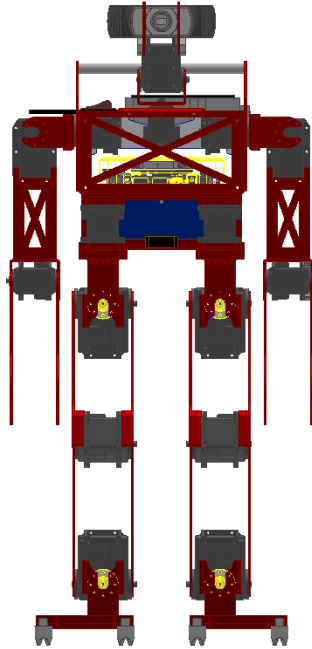


Figure.1 Unfinished Robot

ROBOT NAME	Blankie	
SIZE	Weight	6.38 kg
	Height	596.5 mm
Number of degrees of freedom	All of DOF	20 DOF
	HEAD	2 DOF
	LEG	12 DOF
	ARM	6 DOF
Actuators	ROBOTIS Dynamixel (MX-28, MX-64, and MX-106)	
Type of motors, Speed	MX-106	45 RPM
	MX-64	63 RPM
	MX-28	55 RPM
Computing units	NUC10i5FNK (Intel i5-10210U Quad Core 1.6~4.2 GHz), 4GB DDR4 RAM and 240GB of SSD	
	ARM Cortex M4 STM32F446RE MCU 180MHz	
Camera	C920R Logitech	
Sensors	EBIMU-9DOFV5 (Not using earth magnetic sensors)	
Walking speed	18 cm/s	
Battery	Li-Po 4Cell 4000mAh	
OS/Development Platform	Linux Ubuntu 18.04/C,C++/ROS	

Table 1 Specification of the Robot