

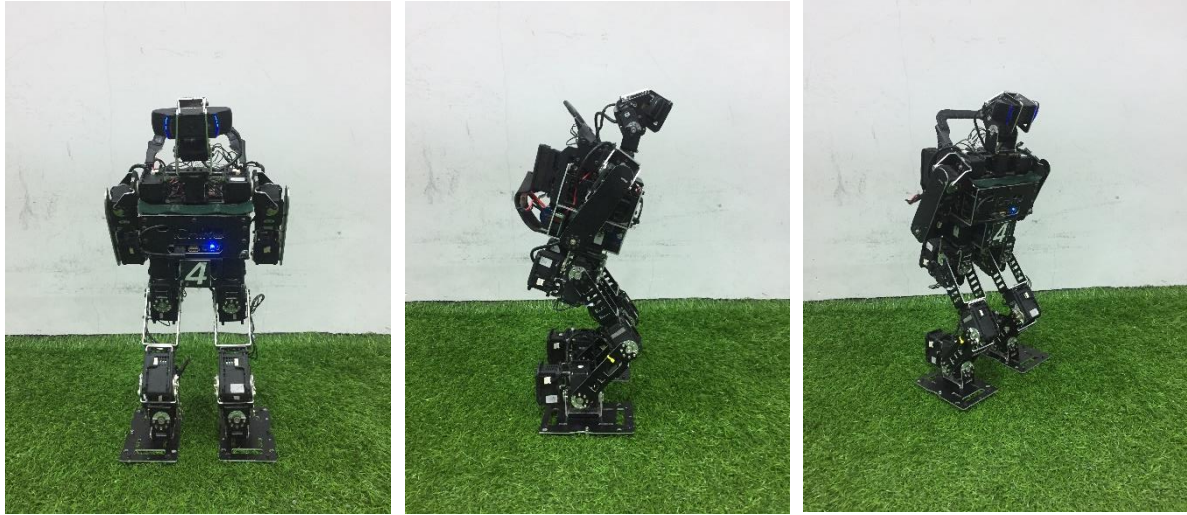
ICHIRO-ITS Robot Spesification

Humanoid KidSize League, Robocup 2019 Sydney Australia

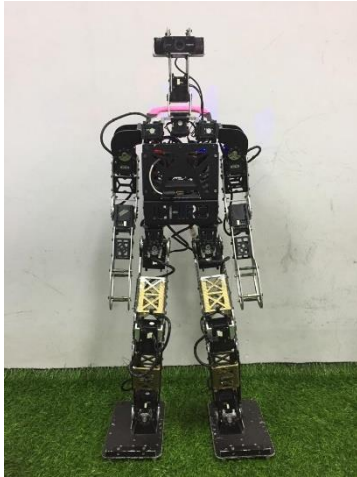
Muhtadin, Sulaiman Ali, M. Reza Ar Razi, Tommy Pratama,
Dhany Satrio Wicaksono, Alfi Maulana, Ahmad Hernando, I.M.P Ari Wijaya, Oktaviansyah Purwo B, Syifaul Qolby A.
Dzulfikar Ats T, Arsy Huda F, Sintia Devi L, M. Attamimi, M Arifin

muhtadin@ee.its.ac.id , ichiro.its@gmail.com

Lab. Robot Cerdas, Robotics Centre Building, Institut Teknologi Sepuluh Nopember (ITS),
Surabaya 60111, East Java, INDONESIA



Items	Description
Robot Name	Arata
Height	58 cm
Weight	4.3 kg
Number of Robots	4 Robots
Walking Speed	25 cm/s
Motors	20 DOF Upper Body : 8 motors Dynamixel MX-28 Lower Body : 12 motors Dynamixel MX-64
Sensors	IMU : MPU6050 Camera : Logitech C922
Computing Unit	Main Controller : Intel NUC 7 Sub Controller : CM-740, Arduino Nano
Operating System	Linux Ubuntu 14.04 LTS



Items	Description
Robot Name	Ithaaro
Height	84 cm
Weight	7.2 kg
Number of Robots	1 Robot
Walking Speed	22 cm/s
Motors	20 DOF Neck : 2 motors Dynamixel MX-28 Arm : 3 motors Dynamixel MX-64 (x2) Leg : 6 motors Dynamixel MX-104 (x2)
Sensors	IMU : MPU6050 Camera : Logitech C922
Computing Unit	Main Controller : Intel NUC 7 Sub Controller : CM-740, Arduino Nano
Operating System	Linux Ubuntu 14.04 LTS