

Bold Hearts Robot Specification RoboCup 2025

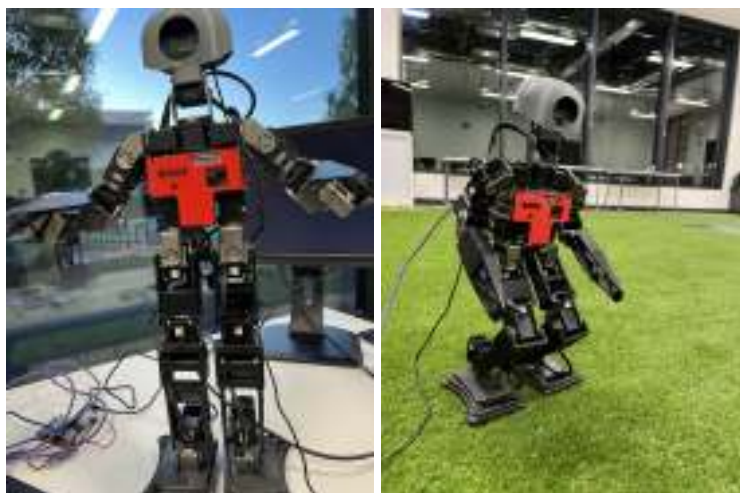


Figure 1: The BoldBot platform.

Table 1: Robot Specification

Component	Details
Robot name	BoldBot
Height	61.5cm
Weight	3.05kg
Walking speed	3cm/s
DoF	20 (MX-64T motors ¹ for the knee servos and MX-28T ² for the others)
Sensors	IMU: 3-axis gyroscope (LYPR540AH) and 3-axis accelerometer (ADXL335) Camera and microphone: Logitech C920 ³ Pro HD Webcam Other: supply voltage sensors, motor/joint angle sensors
Computing units	CPU: Odroid XU4 ⁴ Sub-controller: Cortex-M3 @ 72 MHz subcontroller on CM730 ⁵
Materials	Custom aluminium chassis with 3D printed limbs (PLA)
Batteries	3SIP 1200mAh LiPo
Open Source link	https://gitlab.com/boldhearts

¹Robotis MX64T

²Robotis MX28T

³Logitech camera C920

⁴Odroid XU4

⁵Robotis CM-730