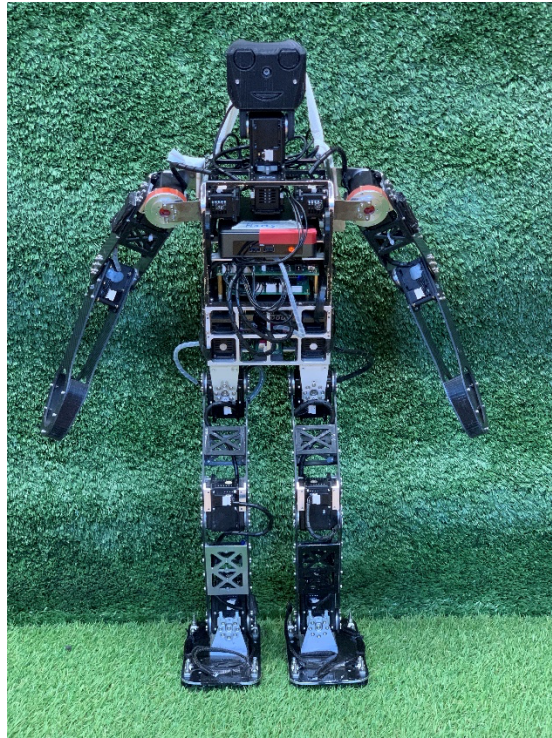


# Robot Specification KidSize 2024

## WF Wolves



- **Name:** Hans, Detlef, Gambi, Jutta & Sara
- **Height:** 86 cm
- **Weight:** 6.4 kg
- **Walking speed:** 23 cm/s
- **Number of degrees of freedom:** 20
  - o 6 per leg (x2), Dynamixel MX-106
  - o 3 per arm (x2), Dynamixel MX-64
  - o 2 in the head, Dynamixel MX-64
- **Motors:** Dynamixel MX64 (x8) and MX106 (x12)
- **Sensors:**
  - o MPU-6050 IMU: 3-axis accelerometer, 3-axis gyroscope
  - o Camera: Logitech C920 HD Pro Webcam
- **Computing units:**
  - o Main processor: Intel i7-7567U
  - o NVIDIA Jetson Tx2
- **Battery:** TF ECO-X 5000-4S MTAG (4S 5000 mAh, LiPo)
- **Electronics:**
  - o Custom Powerboard
  - o DXL-Board with FTDI4232H (USB to RS485)
- **Materials:**
  - o Carbon: arms, legs and foot plates
  - o Aluminum: Torso and small connectors
  - o 3D-Print: Head, bumper, torso base plate and small parts