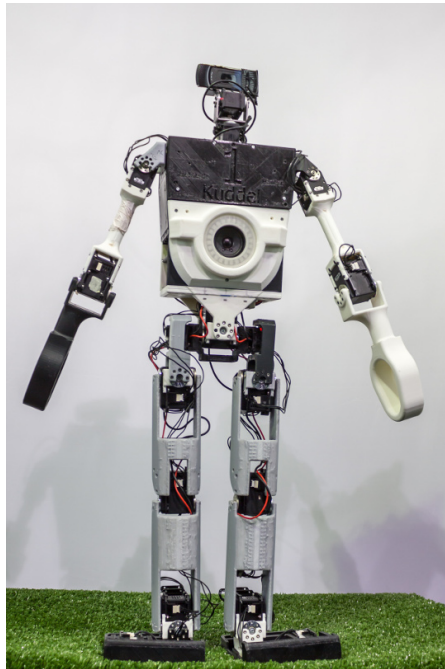


# Robots of the Hamburg Bit-Bots

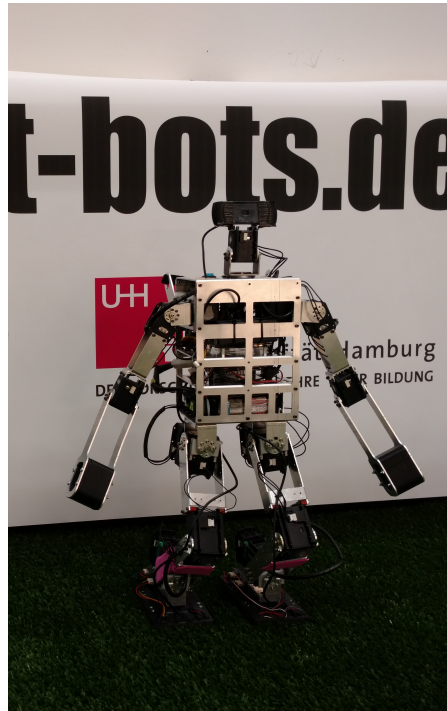
December 14, 2016



Name of type	DarwinOP (modified)
Height	454.5 mm
Weight	2.9 kg
Walking speed	24.0 cm/sec
Degrees of freedom	20
Motors	DYNAMIXEL MX-28
Type of sensors	3-axis gyro (body) 3-axis accelerometer (body) 2 microphones (head) high-definition USB Webcam (head)
Computing unit(s)	1.6 GHz Intel Atom Z530 on-board 4GB flash SSD ARM CortexM3 STM32F103RE 72MHz



Name of type	Hambot
Height	about 870 mm
Weight	roughly 5.5 kg
Walking speed	24.0 cm/sec
Degrees of freedom	24 (speciality: belly roll and belly pitch joint, two toe joints)
Motors	DYNAMIXEL MX-28 & DYNAMIXEL MX-64 & DYNAMIXEL MX-106
Type of sensors	3-axis gyro (body) 3-axis accelerometer (body) 2 microphones (head) high-definition USB Webcam (head)
Computing unit(s)	Samsung Exynos5422 Cortex 1.8Ghz(A15) & 1.3Ghz(A7) ARM CortexM4 STM32F407 168MHz



Name of type	Minibot
Height	about 700 mm
Weight	4 kg
Walking speed	24.0 cm/sec
Degrees of freedom	20
Motors	DYNAMIXEL MX-28 & DYNAMIXEL MX-64 & DYNAMIXEL MX-106
Type of sensors	3-axis gyro (body) 3-axis accelerometer (body) 2 microphones (head) high-definition USB Webcam (head) 3D-printed pressure sensors (feet)
Computing unit(s)	Samsung Exynos5422 Cortex 1.8Ghz(A15) & 1.3Ghz(A7) ARM CortexM3 STM32F103RE 72MHz