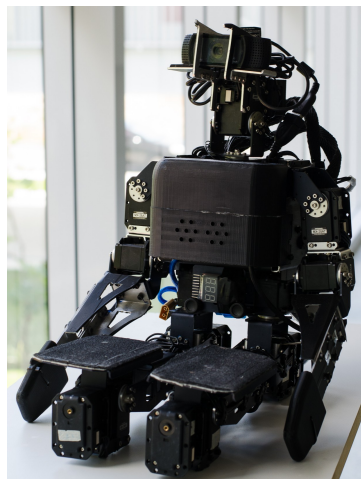


ITAndroids Humanoid Robots Specifications for RoboCup 2024

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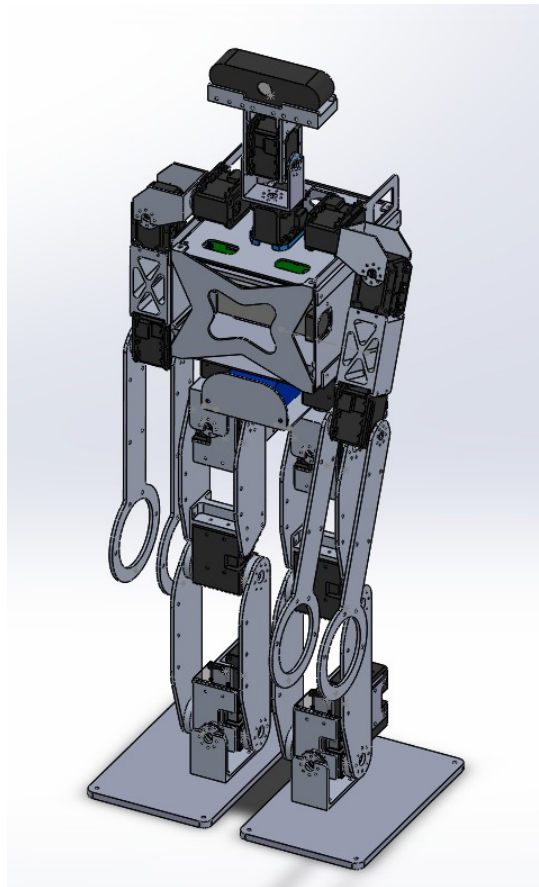
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1 Chape (4x)



| | |
|------------------------------------|---------------------------------------|
| Robot name | Chape |
| Height of the robot | 530 mm (with football boots) |
| Weight of the robot | 3.1 kg |
| Walking speed in cm/s (over grass) | 30 |
| Number of DoF | 20 (2 neck + 3 per arm + 6 per leg) |
| Main computer | Intel NUC Core i5 @ 2.6 GHz dual core |
| Subcontroller | CMB v3 (designed by ITAndroids) |
| Camera | Logitech C920 |
| IMU | MinIMU-9 (3-axis acc. + 3-axis gyro) |
| Servomotors | 20 x Dynamixel MX-28AT |
| Battery | 1300 mAh 4 cell LiPo (14.8–16.8 V) |

2 Chape 2nd Generation (1x) – under development



| | |
|------------------------------------|---|
| Robot name | Chape 2nd Generation |
| Height of the robot | 650 mm (with football boots) |
| Weight of the robot | ≈ 4.5 kg |
| Walking speed in cm/s (over grass) | 20 |
| Number of DoF | 20 (2 neck + 3 per arm + 6 per leg) |
| Main computer | Intel NUC Core i7 @ 2.6 GHz quad core |
| Vision Processing Unit (VPU) | Intel Movidius Neural Compute Stick 2 |
| Subcontroller | PCMB v4 (designed by ITAndroids) |
| Camera | Logitech BRIO |
| IMU | MinIMU-9 (3-axis acc. + 3-axis gyro) |
| Servomotors | MX-28AT (neck and arms) + XM540-W150-R (legs) |
| Battery | 3000 mAh 4 cell LiPo (14.8–16.8 V) |