


## pUNAMoids : Specifications Page

Adalberto LLarena, Boris Escalante, Fernando Arámbula, Lauro Vázquez, Alfonso Lizarraga, Ignacio López

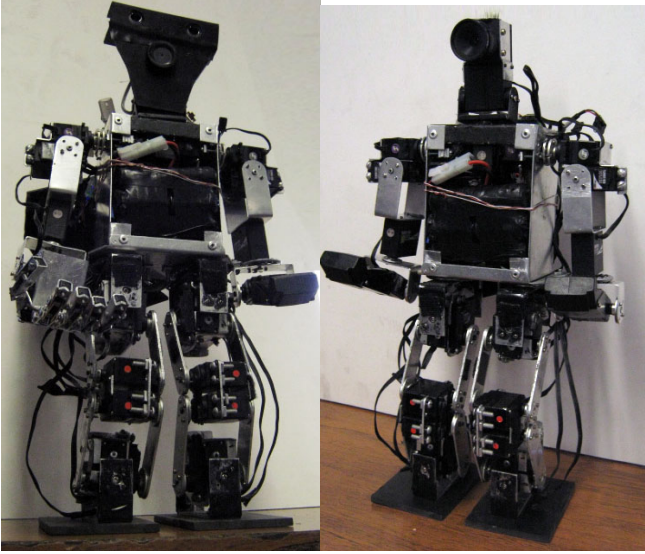
Bio-Robotics Laboratory, Department of Electrical Engineering  
 Universidad Nacional Autónoma de México, UNAM  
[adallarena@aol.com](mailto:adallarena@aol.com)

1.-Robot Picture	<div style="text-align: center;">  </div> <p>Note: We have three robots with exactly the same characteristics and hardware</p>
2.- Names	<p>“<i>Mixtli</i>” (<i>puma</i> in nahuatl), “<i>Tafari</i>” (last Ethiopia’s emperor), and “<i>Riu</i>” (<i>dragon</i> in Japanese)</p>
3.- DOF	<p>Total: 16. 5 in each leg.</p>
4.-Computing Unit	<p>Micom MR-C3000 with ATmega 128 MPU 8bit RISC at 7.3728Mhz, with 32K flash memory and a 1Gb SD Memory Card.</p>
5.- Walking Speed	<p>Walking: 0.05 m/s. Running: 0.16 m/s</p>
6.- Camera	<p>CMU Cam 3 camera. This camera is equipped with a Philips LPC2106 processor, 64 Kb RAM, 128 Kb ROM, serial port and SD card slot. It can grab RGB and YCrCb images up to 352 by 288 pixels at rates of 26 FPS.</p>
7.- Sensors	<p>M75501 gyroscope and GP1S036 tilt sensor</p>
8.- Other Specs	<p>Height: 470 mm. HCOM : 265 mm, Weight: 1.6 kg. Foot Area: 56 cm<sup>2</sup></p>
9.- Communications	<p>Digi Wi-ME Wi-Fi Module</p>

## pUNAMoids : Specifications Page

Adalberto LLarena, Boris Escalante, Fernando Arámbula, Lauro Vázquez, Alfonso Lizarraga, Ignacio López

Bio-Robotics Laboratory, Department of Electrical Engineering  
 Universidad Nacional Autónoma de México, UNAM  
[adallarena@aol.com](mailto:adallarena@aol.com)

1.-Robot Picture	
2.- Names	“ <i>Brody</i> ” (Goalkeeper) and “ <i>Tuca</i> ” (Attacker)
3.- DOF	Total: 22. 7 in each leg.
4.-Computing Unit	Advance Logic Intel Core 2 Duo Main Processing Board. SSC-32 Servo-Controller Serial Unit.
5.- Walking Speed	Walking: 0.09 m/s. Running: 0.24 m/s
6.- Camera	“ <i>Tuca</i> ”: Minoru 3D Stereo Camera. “ <i>Brody</i> ”: U-eye UXGA USB Camera
7.- Sensors	M75501 gyroscope, GP1S036 tilt sensor, HMC6352 Spark Fun Compass, SparkFun Electronics - Triple Axis Accelerometer Breakout - ADXL330
8.- Other Specs	Height: 450 mm. HCOM : 225 mm, Weight: 2.4 kg. Foot Area: 72 cm <sup>2</sup>
9.- Communications	Wi-Fi USB Module