Robotics

Robots we use at CEATIC

Pepper

Robot Pepper

Pepper is humanoid and programmable robot and its height is 120 centimeters. Its design oriented to interact with people, has a technology that allows to analyze verbal and non-verbal language, head position and voice tone.

Robot-client communication

Thanks to its sensors, a 3D camera and four microphones, Pepper is able to recognize the human emotions, gestures, sounds and touch, creating an environment of empathy and connection that promotes a fluid and effective communication between robot-client.

Pepper is capable of very flexible movements, used in all its interventions such as body language and also can move at a speed of 3 km/h.

Tablet

The robot Pepper has a touch screen of 246 x 175 x 14’5 cm with a resolution of 1280 × 800, located in the area of the chest. There are numerous possibilities to programming and configure the robot and, in addition, it can transmit and receive information through its online connection.

Interaction

This robot is ideal in environments related to customer service. These are some of the functions that it can perform:

- It attracts the attention of customers.
- It introduces products and explains its features
- It provides data to customer about locations and services.
- It scans coupons, cards, EAN, QR codes…
- It connects and shares data with CRM, ERP, shop online, corporate website…

Programmable

This humanoid robot is ideal to get started in robotics programming, and as a research and development tool for new applications.

The programming systems that Pepper supports are:

- Choreographe
- Python
- C++

- Java
- ROS

Technical specifications

- Weight: 28 kg
- Height: 120 cm
- Width: 42,5 cm
- Battery: Lithium, 30.0Ah / 795Wh
- Autonomy: About 12 hours.
- Network: Wi-Fi / Ethernet
- Speed: More than 3km / h
- Motors: 20
- Moving parts: Head (1), shoulders (2), elbows (2), wrists (2), fingers (10), hips (1) and knees (1)
- Wheels: 3 (omni-directional)
- Movement: 360º
- Tablet: LG CNS

External Link: Pepper

Bioloid Robotics Premium

Bioloid Robotics Premium

Bioloid Premium Kit is one of the top performing humanoid robots available today. The new CM-530 is a much improved version of the tried and true CM-5 Bioloid Controller with the slick new Robo-Plus software that combines the ease of use of 'building-block' style programming with the logic and flow of the 'C' programming language. A 11.1v 3S LiPo battery pack is not only lighter weight, but provides a higher operating voltage which results in stronger and quicker performance from the AX-12A Robot Servos.

The Bioloid Premium Kit brings all of these features along with a slick new aesthetic design, providing one of the most functional and comprehensive humanoid robot kits on the market today.

Humanoids aren't all that can build with this kit. The Bioloid system was designed from the ground up to be completely modular; it’s possible to build and rebuild dozens of different robots. There are a total of 29 different robot examples ranging from wheeled robots, hexapods, quadrupeds, robot arms, and multiple bipeds including the top-notch Bioloid Premium Humanoid variants.

Features:

- Excellent humanoid walking performance (adjustable posture while walking)
- Various sensors including Gyro, Distance ranger, IR and external IO ports for adding your own sensors
- Remote control capability thanks to the Zigbee protocol
- C-Style programming & motion teaching with RoboPlus S/W through USB
- Transparent humanoid skin for customization

External Link: Bioloid

Zowi

Zowi Robot

This friendly robot has one purpose: to teach kids that technology can be transparent, proximate and fun. In addition to being a toy, it is also an educational ecosystem with an extensive pedagogical pathway. What's more, it is an open source robot: the physical design, the code and the app have all been made freely available so that anyone can understand it and modify it.

Zowi can communicate and be controlled via Bluetooth using the Zowi App.

By pressing the buttons located on the back, you can explore basic functions.

1. Dancing: Zowi surprises with his original movements and dances, thanks to the 4 motors that act on it.

2. Walking and avoiding obstacles: Zowi's eyes are currently ultrasound sensors.

3. Zowi has a microphone that it is used to listen what is happening around.

External Link: BQ Zowi