

FAQ

- What does ASIMO mean?
 - “ASIMO stands for Advanced Step in Innovative Mobility”(FAQ).
- Why was ASIMO developed?
 - ASIMO was developed to assist people in their daily lives, whether that be at work or at home(FAQ).
- What can ASIMO do?
 - ASIMO can walk at 2.7 kph (1.7 mph) and can run at 6.0 kph (3.7 mph).
 - ASIMO can move objects around by pushing them on a cart.
 - ASIMO can move towards a destination without stopping.
 - ASIMO can move and react in sync with people.
 - ASIMO can also react to simple voice commands (FAQ).

Further information on ASIMO

For more information on ASIMO, visit the ASIMO homepage at <http://asimo.honda.com/>, the ASIMO Facebook page at <http://www.facebook.com/ASIMO?ref=mf&v=wall>, or follow ASIMO on Twitter at <http://twitter.com/asimo> .

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Works Cited

ASIMO Technical Information. Honda, 2007. Web. 5 May 2010.

Disneyland. Honda, 2010. Web. 5 May 2010.

Frequently Asked Questions. Honda, 2010. Web. 5 May 2010.

Gallery. Honda, 2010. Web. 5 May 2010.

What is ASIMO?

An explanation of Honda's ASIMO robot



Figure 1: ASIMO at Disneyland

Source: (Disneyland 2010)

How does ASIMO Walk?

ASIMO uses the i-WALK, or Intelligent Real-Time Flexible Walking Technology, to walk flexibly and without pauses. The i-WALK uses a mix of previously developed acceleration, steady walking, and deceleration patterns as well as prediction movement control.

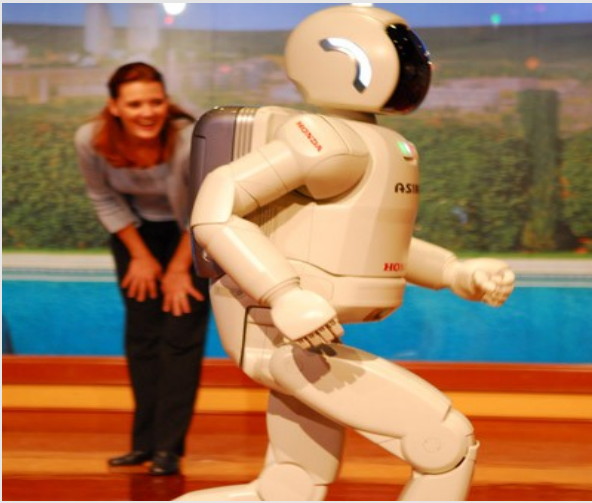


Figure 2: ASIMO walking. Source: (Disneyland 2010)

When humans are walking straight and go to turn a corner, they shift their center of gravity towards the inside of their turn before turning. The i-WALK allows ASIMO to guess its next movement and shift its center of gravity if it is going to turn, preventing the need to stop and “think” before turning (Technical Information 13).

How does ASIMO move things?

- **Carrying a tray**
 - While walking, ASIMO uses its entire body to control its movement to prevent spilling. If the tray slides, the force sensors in its wrists detect this and ASIMO stops walking.
 - ASIMO uses the eye camera in its head and its force sensors to move in sync with the person to take or give a tray (Technical Information 17).
- **Handling a cart**
 - ASIMO uses the force sensors on its wrists to adjust the force required to push the cart, as well as to maintain a proper distance.
 - When the cart is disturbed, ASIMO can react by slowing down or changing directions (Technical Information 17).

How does ASIMO interact with people?

- **Recognition technology**
 - ASIMO uses its eye camera to detect movement and figure out distance and direction of an object, being able to greet or avoid as necessary.
 - Hand signals, gestures, and posture can be recognized as commands, and ASIMO can react accordingly, as seen in Figure 2.
 - ASIMO can have up to ten preregistered faces in its memory. It can recognize them and address them by name and communicate messages (Technical Information 12).



Figure 3: ASIMO shaking hands. Source: (Gallery 2010)