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Adorable Walking Robot Sets Distance Record

By [Dylan Tweney](#)   July 27, 2010 | 3:33 pm | Categories: [R&D and Inventions](#)



A four-legged robot nicknamed “Ranger” has set a distance record, walking 14.3 miles before it ran out of juice.

That amounts to 108.5 laps around the 1/8-mile indoor track at Cornell University’s Barton Hall — or 65,185 steps of Ranger’s spindly metal legs.

The robot’s journey took it 10 hours, 40 minutes and 48 seconds, using about a penny’s worth of electricity for each 3 miles it traversed. Although several humans accompanied it for parts of its stroll, Ranger was never touched by human hands during the journey.

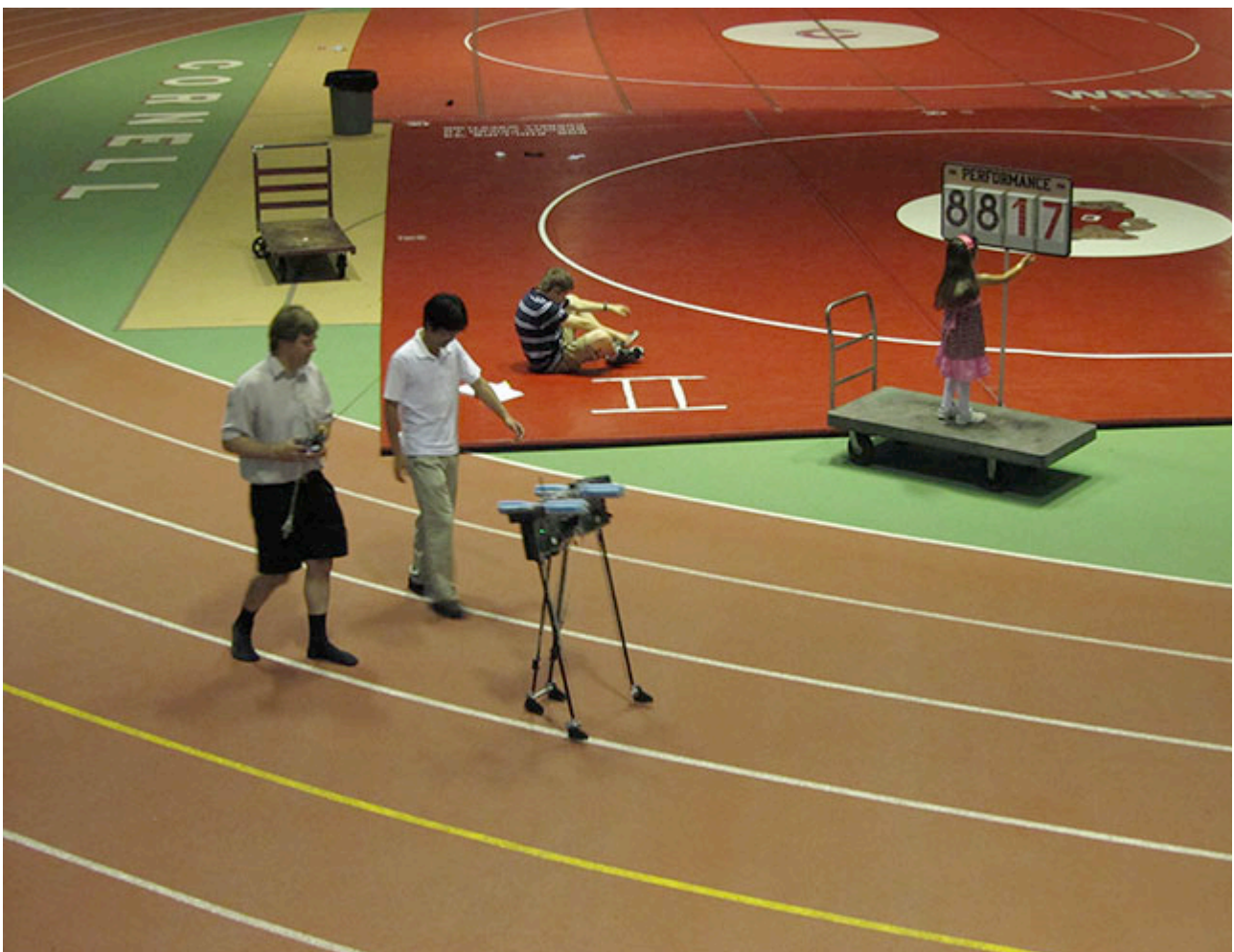
Earlier versions of Ranger walked just 1 kilometer in 2006 and 9.07 kilometers (5.6 miles) in

2008.

Ranger's steps are coordinated by 6 on-board microprocessors, but the robot's steering is done by remote control. The "eyes" and "ears" on the robot are not sensors, but foam padding, designed to protect the robot in case of falls.

The research team that built Ranger was aiming for distance, not speed. By comparison, Boston Dynamics' [BigDog, an eerie quadrupedal robot](#) built for carrying 300-pound loads, set the previous robot walking distance record of 12.8 miles. But BigDog is loud and frightening, while Ranger is quiet and kids love him (at least, one kid appears to).

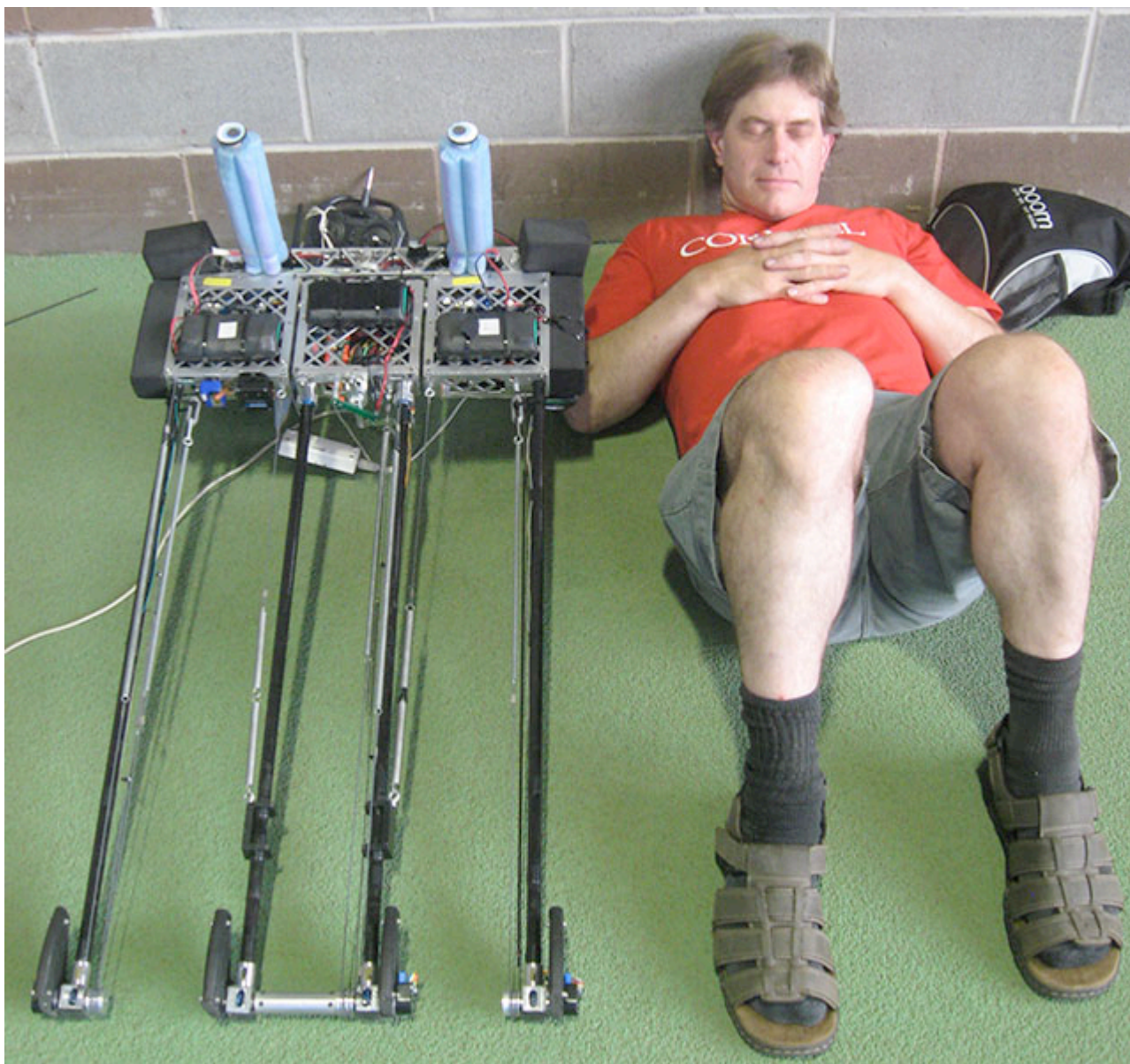
See below for more photos and a video showing Ranger's long walk. And for details and more photos, see the [Cornell Ranger 2010 page](#) at Cornell.edu.



Jason Cortell, Lipeng Yuan, Matthew Proudlove and Fatemeh Hasaneini accompany Ranger as it rounds the curve on an indoor track.



Humans Jason Cortell (on cart) and Lipeng Yuan may be at the limits of their endurance, but Ranger walks on.



At the end of the marathon walking session, Ranger and Jason Cortell take a much-needed break. Somebody call Beer Robot!

Top photo: Ranger completes a lap around the track, accompanied by Fatemeh Hasaneini, the 6-year-old daughter of one of the students who worked on the robot.

Photos and video courtesy Cornell University.

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Dylan Tweney is a senior editor at Wired.com and publisher of [tinywords](#), the world's smallest magazine.

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Pmbster

Wow. And by that I mean the Darpa Dog you linked to, not this thing I would hardly call a robot. "Looks like a guy on crutches" as posted above (make that below) sounds right, only less so because the seemingly free legs appear to be locked together as well. This is not that different than having a couple of boards hinged together to skip along. (Getting around the turns being the hard part then.)

Calling this mild contraption adorable because one kid was intrigued is something of a stretch as well...

That BigDog tho, 4 individually operating legs, is eerily cool as can be. Wow.

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mgweissman

OMG - couldn't believe there was a Robot named "Ranger" at Cornell. I just became a HS engineering/robotics teacher who loves the Rangers and went to Cornell in '88. WIld!

[9 months ago](#)

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jack33w

Robots in Japan are way ahead of this ... contraption. America has fallen behind.

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Telanis

Is the most scientific measure you could use really "a penny's worth" of electricity?

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Tony Annechino

Looks like a guy on crutches... I guess it's a start...

(Not nearly as creepy as that large walking headless Army dog...)

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Pmbster

Heh heh, be interesting if adding some kind of a head would appease the horrified - something I don't doubt they would consider doing for public relations purposes...

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