Meet Mr. Bah, a robot that senses when grandma is about to lose her balance and CATCHES her before she falls - a potentially huge development in a rapidly aging world

- **Mr. Bah, a robot developed by a team of international researchers, can detect when an older person is losing their balance and catch them before they fall**
- **The device resembles a motorized scooter and comes with built-in sensors and straps**
- **In a clinical trial with 29 patients over five days, it prevented all falls and helped patients with sitting, standing and walking**
- **22% of people worldwide will be over 60 years old by 2050; in the U.S., falls are the leading cause of injury-related deaths among those 65 and older**

By CHRISTOPHER CARBONE U.S. SCIENCE AND TECHNOLOGY EDITOR FOR DAILYMAIL.COM
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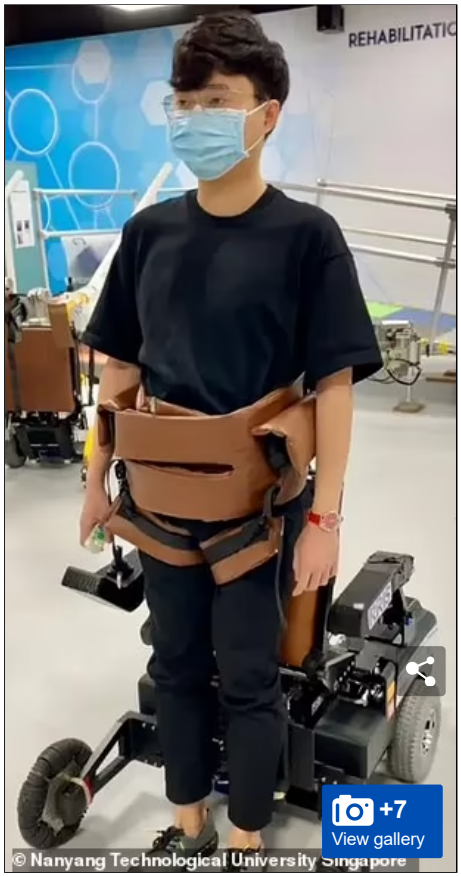
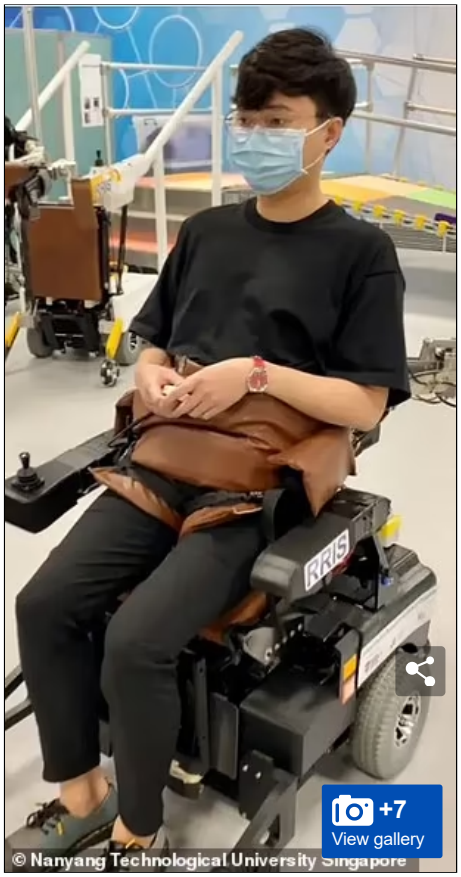
Scientists recently unveiled a new robot that can detect when an older person is losing their balance and catch them before they fall - a potential breakthrough in a world where the portion of people over 60 years old will nearly double to 22% by 2050.

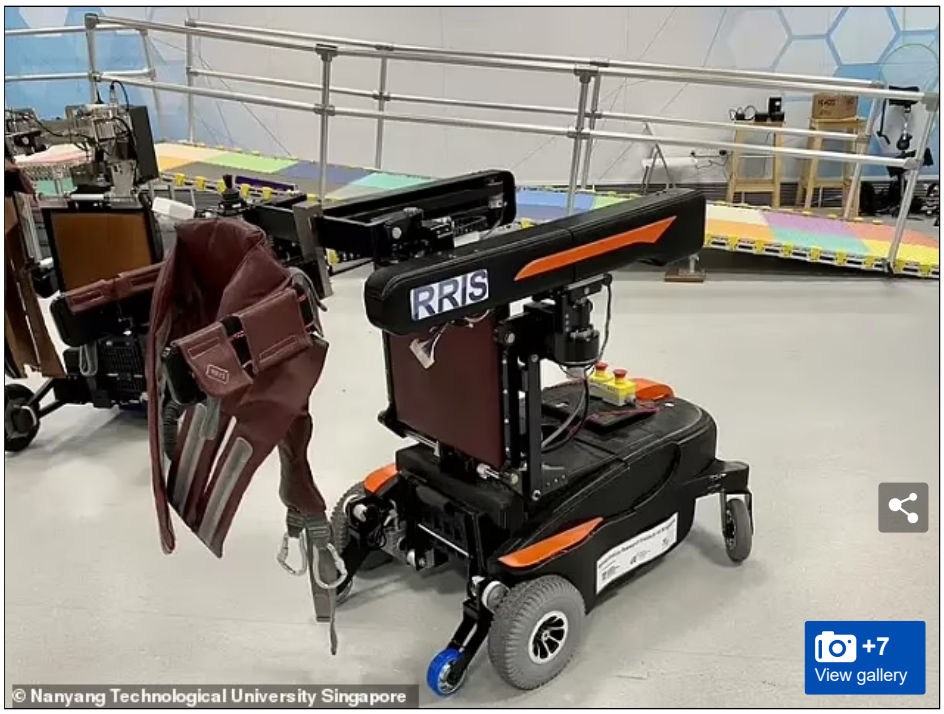
The device, which researchers hope to begin selling within the next year, resembles a motorized scooter and is equipped with in-built sensors as well as a harness that patients can wear around their hips.

It's been dubbed Mr. Bah, which is shorthand for mobile robot balance assistant. The device could have a broad impact, since the **CDC** reports that falls are the leading cause of injury-related deaths among people over 65.





A man demonstrates the capabilities of Mr. Bah, a robot that can catch an elderly person before they fall



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Developed by researchers at Nanyang Technological University and Tan Tock Seng Hospital (TTSH) in Singapore, the robot would also help those who have a hard time walking and balancing to stand up safely from a seated position.

'[The robot] could prove to be an invaluable resource for older adult users, and help promote independent living and aging,' associate professor Wei Tech Ang, the executive director of the Rehabilitation Research Institute of Singapore where the bot was co-developed, said in a statement.

'The development of the robot was as result of a fruitful collaboration with TTSH, blending our expertise in engineering and machine learning with their strengths in rehabilitation and medicine.'

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During clinical trials involving 29 participants, including patients who suffered from stroke, traumatic brain injuries and spinal cord injuries, the researchers found that the robot was successful in aiding them with sitting, standing, and walking, as well as assisting in tasks like fetching water.

There were no falls recorded in the trials, which spanned three days per participant.

The robot, which follows people around while they're doing everyday tasks, can also play a role in keeping the elderly more active.

'A lot of these patients, when they are fearful of falling down, they don't walk they just sit down all day. And because of that, they go to a downward spiral,' Wei Tech Ang told Insider.

The machine comes in three models: The first model caters to users that weigh up to 176 pounds, while the second assists those who weigh up to 264 pounds. The third version, the agile model, supports more dexterous movements.

Adjunct Associate Professor at NTU's Lee Kong Chian School of Medicine Karen Chua, and Senior Consultant at TTSH's Department of Rehabilitation Medicine, one of the co-leads of the MRBA's development said in a **statement**: 'One of TTSH's key strategies is to empower patients with greater access to innovative robotic rehabilitation. We want to make robotics therapies more sustainable and accessible in the community where our patients can lead healthier and happier lives.'

The announcement of Mr. Bah comes just a few weeks before the expected unveiling of Tesla's Optimus humanoid robot - which may one day care for older people - at AI Day on September 30.

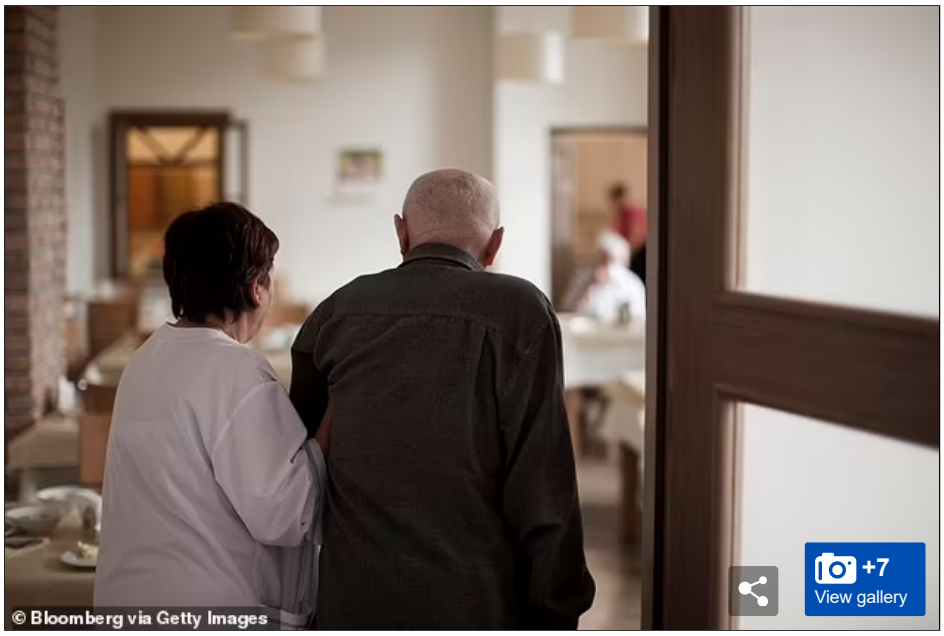
'Tesla Bots are initially positioned to replace people in repetitive, boring, and dangerous tasks. But the vision is for them to serve millions of households, such as cooking, mowing lawns, and caring for the elderly,' Musk wrote in an essay published in China Cyberspace magazine.

The Tesla bot, which would be 5'8 and weigh 125 pounds, is set to include the Autopilot computer used in the company's electric cars, which will allow the humanoid to recognize real-world objects, although the robot will have its own customized sensors and actuators.

It will also be able to 'deadlift' up to 150 pounds, carry 45 pounds, walk 5 miles per hour and have human-like hands plus visual sensors giving it the ability to 'see.'

'It's intended to be friendly, of course,' Musk said during the initial Tesla Bot announcement last year. 'And navigate through a world built for humans.'

During a question period following Tesla's AI Day last year, Musk said: 'We should be worried about AI. What we're trying to do here at Tesla is make useful AI that people love and is … unequivocally good.'



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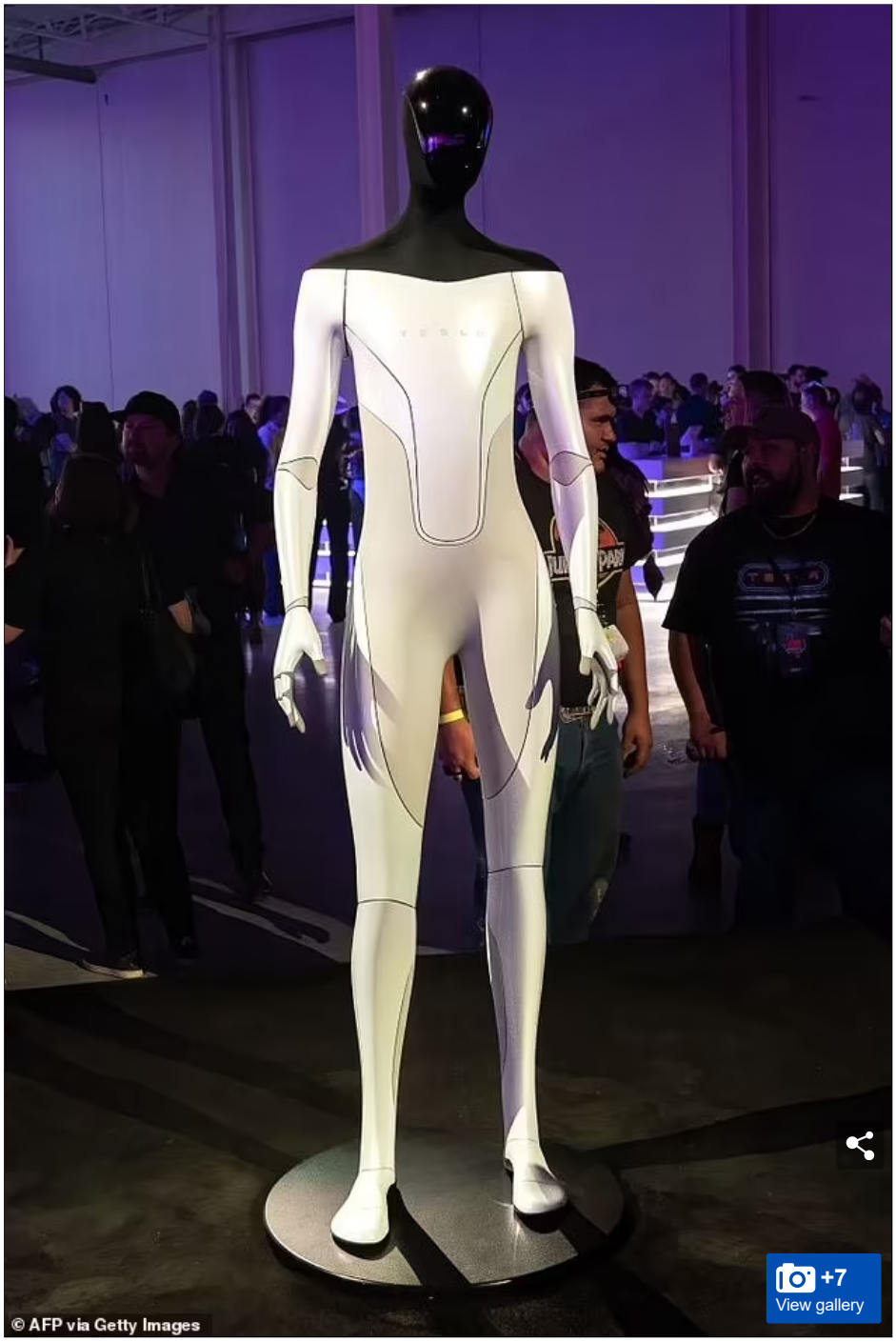

Elon Musk's Tesla bot, which could handle domestic tasks like caring for the elderly, will be able to 'deadlift' up to 150 pounds, carry 45 pounds and walk 5 miles per hour

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