

Japan is banking on friendly robots like these to save its economy

be nice



Attentive little guy. *Reuters / Toru Hanai*

Japan's space agency announced today that it will be sending a small robot named "Kirobo" into outer space (paywall) to keep Japanese astronauts company. Engineers fashioned the pint-sized robot to be cute, attentive (it will recognize people by their faces), and responsive to questions. A sister robot ("Mirata") will stay in Japan as backup crew to analyze Kirobo's performance.

The latest automated venture is another sign of the country's robot obsession. Here are a few examples of how robots are infiltrating everyday life in Japan:

As friends

Kirobo's flight into space is a chance for the researchers to study how well man and robot get along. "I think it's because when we are children, we often read manga stories about friendly robots. We wanted to use outer space as the setting for other people around the world to see that robots and humans can live together easily," Tomotaka Takahashi, a pro-

essor with Tokyo University who is participating in the project [told](#) (paywall) the Wall Street Journal.

Friendly robot research is part of the government's plan to put millions of dollars into building robots that will [care for the elderly](#). Because of Japan's aging population, it faces a manpower shortage in multiple industries.

As a robot rock band

Earlier this month, [a band](#) of robots playing guitars, drums and a keyboard—engineered by researchers at Tokyo University—accompanied pop group Amoyamo in Tokyo.



What a heavy metal band looks like in Japan.*Reuters / Toru Hanai*

As manpower

Early developers of automated industrial robotics, the Japanese government has plans to install one million robots in factories across the country by 2025. In 2005, Japan's robots already numbered [over 370,000](#) and made up about 40% of the world's total.

As first responders

A robotic "[safety crawler](#)" in Japan can carry a person of up to 250 pounds (113 kg). Originally created for a police department in Yokohama, the robot is intended to help transport

people hurt after disasters like earthquakes. It's controlled remotely and has sensors to detect a victim's vital signs.

As a real-life Iron Man

A giant robot made by Suidobashi Heavy Industry for consumer use is modeled after a 1980s anime storyline called Votoms. The human controlling the robot sits inside it and can motor it around town (picture Tony Stark in his Iron Man suit). Its engineers say it isn't meant to be a weapon, but it can be programmed to shoot a BB gun when its [operator smiles](#). It can also be operated remotely [with an iPhone](#) for [firefighting or dusting](#).