It was once reserved only for futuristic science-fiction movies: humans and robots, coexisting in daily life. That robot future is now a reality, and many of these new machines are designed to make our lives easier.

To help people as they age, Toyota Research Institute (TRI) is developing human-assist robots in its labs in California. This "gantry robot" is adapted for the home from a style more often seen in assembly and manufacturing lines. Since these robots hang from the ceiling like a bat, they save floor space and can reach other machines and parts easily from above. This TRI robot is able to complete tasks such as loading the dishwasher. Scroll through to see more innovative robots designed to help humanity. Toyota Research Institute.

TRI says its philosophy is to develop robots which amplify human ability, instead of replacing human beings. Toyota established the institute in 2015 to research artificial intelligence (AI) with a $1 billion investment. It is also testing more traditional floor-based robots, like the robot helper pictured here. TRI says this robot will have the same basic capabilities as its overhanging counterpart. Toyota Research Institute

In the place of hands, the robots use "soft bubble grippers," air-filled cushions that gently pick up household objects. TRI says it hopes its systems will help people live independently for longer and will assist an increasingly aging workforce. But for now, these robots are just prototypes. Toyota Research Institute

However, not all helpful robots are prototypes. These robots were donated by the United Nations Development Program (UNDP) to Rwanda, to help fight the spread of coronavirus. They are used for temperature screening, monitoring the status of patients, and keeping medical records, according to Rwanda's Ministry of ICT and Innovation. Rwanda Biomedical Centre

Developed by Softbank, this robot is called "Pepper" -- designed to be able to respond to the needs and preferences of people from different cultures. To see whether Pepper could help fight loneliness in older people, a study was conducted with care home residents in Britain and Japan. Researchers found people who interacted with it for up to 18 hours over a two-week period "saw significant improvement to their mental health." BERTRAND GUAY/AFP/AFP/Getty Images

"Pepper" has also been used in Hamazushi, a sushi restaurant chain in Japan. It demonstrated that the robots can handle services like receiving and helping customers to their tables. KAZUHIRO NOGI/AFP/Getty Images

Also in Japan, "Paro," the therapeutic robot baby seal, has been used to comfort people affected by disasters, as well as the elderly and disabled. It was designed to provide the soothing qualities of a pet and was developed by Japan's National institute of Advanced Industrial Science and Technology. KAZUHIRO NOGI/AFP/AFP/Getty Images

This Italian woman is being assisted by the Giraffplus robot carer at her Rome apartment. The Giraffplus is connected to sensors that measure indicators such as blood pressure and communicate with medical staff. courtesy Teresse Andersson/giraffplus

This September, Lawson deployed its first robot in a Tokyo convenience store. Because Japan has the oldest population in the world, robots are being utilized to address the labor shortage. The "Model-T" robot is controlled by shop staff remotely; a human "pilot" wears a virtual reality (VR) headset and special gloves that let them "feel" in their own hands the products the robot is holding. Telexistence

To help elderly and disabled people with lifting, Japanese company Cyberdyne developed a Hybrid Assistive Limb (HAL) suit, shown here. courtesy cyberdyne

iRobot, the US-based company that produces the robot vacuum Roomba, recently announced the household helper will be getting an upgrade. You can now set areas in your home where Roomba should not go, highlight other areas that are particularly messy and need more frequent cleaning, and even program house cleanings for times when you're not home. iRobot

Last year, Walmart announced robot janitors will be put to work in its stores, in order to free up workers to help customers more directly. This 920-pound autonomous floor scrubber is called the "Auto-C"and uses automated technology to navigate custom routes around the store and mop up the floors. It will join "Auto-S," a shelf-scanning robot. CNW/Brain Corp

Boston Dynamics first introduced "Spot," the robot dog pictured here, in 2015, when it was still in development. During the coronavirus pandemic, researchers have modified "Spot" to measure patients' vital signs. The aim is to remove the risk of health workers being exposed to patients showing Covid-19 symptoms. Boston Dynamics

Soon, robot "dogs" may also join the US Air Force. In an exercise, these robots were sent outside the aircraft to scout for threats before the humans inside would be exposed to

them. This Ghost Robotics Vision 60 prototype operates at Nellis Air Force Base, Nevada. Tech. Sgt. Cory D. Payne/USAF