

# A Home Robot for the Elderly

**W**ith the aging population demographic in Europe and the US, scientists have been experimenting for years with the idea of building a 'home help' robot to assist the elderly with chores around the house. Now researchers in the US have come a step closer to making this happen.

Roboticists have developed a humanoid robot – known as Domo – equipped with a motion tracking device which helps it size up objects and place them in a cupboard according to their size and shape.

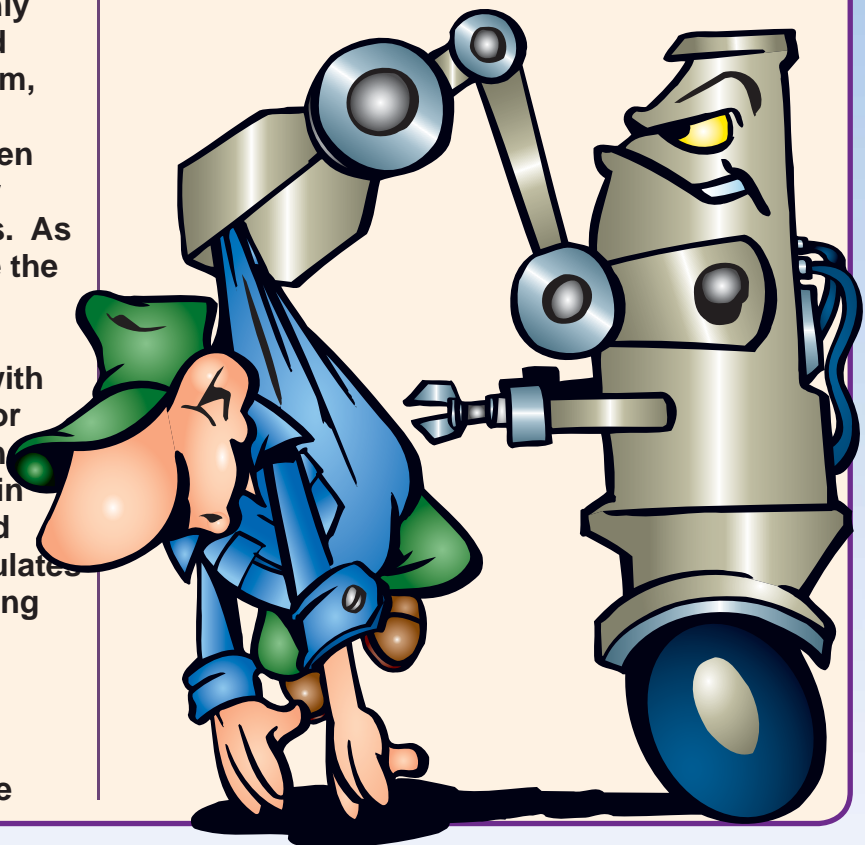
Although robots have been used in industrial environments for years, they typically only deal with elements that come in standard shapes and sizes. Strange as it may seem, the home is actually quite a complicated environment; with so many variables, even a simple task like putting groceries away requires a number of complex processes. As human beings, we tend to underestimate the complexity of such daily activities.

Domo the robot is programmed to deal with the variables and complexities we take for granted when we put our weekly shopping away. First the robot wiggles the object in its hand whilst a video camera in its head records the movement. Domo then calculates the size and shape of the item. If it's a long object – a pack of spaghetti for example – further video analysis is required.

The robot's software will measure the movement at the tip of the object and use

this information to calculate dimensions – and then decide how best to place it in the cupboard. Domo can not only help put those groceries away – he can also place a spoon in a bowl and help you tidy the house (by following behind with a box for you to place your clutter).

In reality, it's unlikely Domo will ever make it into the homes of the elderly – he has been built purely for research purposes. But that research will certainly be useful for other scientists in their quest to build the ultimate home help robot.



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