Meet your new colleague Bob - the robot

Could Bob, a robot programmed to do office work, become your new personal assistant? Harry Wallop investigates

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11:30AM BST 19 Jun 2014

He can't fetch the tea, he can't photocopy and he cannot even open a door, but Bob the robot could become a fixture of office life in a few years.

That is according to scientists at the University of Birmingham, who have helped develop the robot and G4S, the security company that has had Bob acting as an intern at its offices in Gloucestershire.

Bob is a joint project between the University of Birmingham and five other institutions around Europe, including the Vienna University of Technology, and has been funded with a £7.2 million European grant.

Mechanically, he is very basic – he moves a bit like a Dr Who Dalek, rolling along the floor and unable to cope with steps.

But the five foot robot carries cameras, which are able to map any room or office block he visits in 3D.

He is then able to "learn" what an office normally looks like, including details on a desk, and he is meant to be able to either alert a security guard if something is awry, or be able to track down certain objects.

On his three-week stint at the offices of G4S, a security company, in Tewksbury, he roamed the corridors and monitored whether fire doors were closed and whether fire extinguishers were in their correct place. He should, in theory, be able to monitor a Whitehall department, for instance, which has a strict policy in not leaving sensitive paperwork on desks overnight.

Robots, or certainly programmed machines, have been in use in British workplaces since the Industrial Revolution. But what they have been very good at is repeatable tasks. They have only made small steps at reacting to unpredictable events.

Nick Hawes, senior lecturer in intelligent robotics at the University of Birmingham, said: "Humans are really good at subtlety and intuition. But they are not always systematic. The benefits of robotic

automation in security, for instance, are the same as you get with car manufacturing. You get repeatability and predictability. You don't get enhanced abilities. But in security they won't skip a room.

"Robots replacing humans is not the way to look at this. Because humans have a huge range of capabilities that you can't automate. We think, however, robots could augment a team of humans. In terms of security you get a more reliable observation of a room to a certain level of detail and a roving camera, but you don't get human decision making and intuition."

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