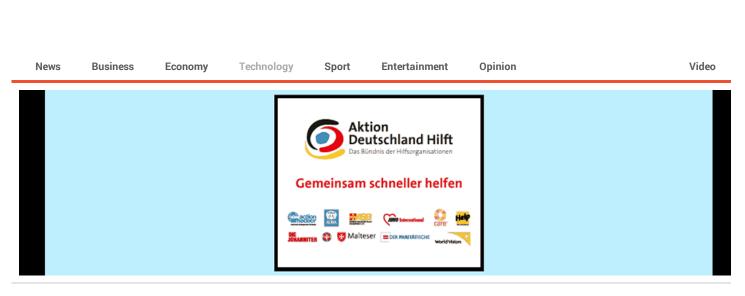
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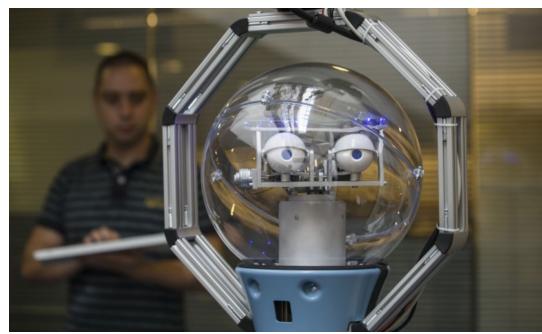
Meet Bob: The UK's First Ever Robot Security Guard



By <mark>Mary-Ann Russon</mark> June 20, 2014 19:15 BST

TUESDAY, 11TH NOVEMBER, 2014

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Bob, the UK's first autonomous robot security guard University of Birmingham

The University of Birmingham has built the world's first ever robot security guard, Bob, as part of a £7.2 million (\$12.3m) project called STRANDS, where robots are being taught how to act intelligently and independently in real-world environments.

These robots can be used to support <u>home</u> care assistants or security <u>officers</u>, and to that effect, Bob has just spent three weeks patrolling the headquarters of security firm G4S in Gloucestershire.

Bob is a completely autonomous robot that stands 5ft 10in tall. He scans all the rooms in the offices using 3D sensors and builds a picture of what they should look like.

If anything moves or changes since his most recent scan, such as a door being opened, or furniture being rearranged, he stores the information and then reports it to his human superiors.

He also knows how to charge himself when his battery runs low, and he knows to ask for help if he gets stuck whilst moving around the building.







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Bob patrolling the hallways at the G4S offices in Gloucestershire University of Birmingham

Meet Bob: The UK's First Ever Robot Security Guard

"We wanted to build an autonomous intelligent robot that can be put into a real world scenario like a place of work," said Dr Nick Hawes, from the School of Computer Science at the University of Birmingham, who leads the STRANDS project.

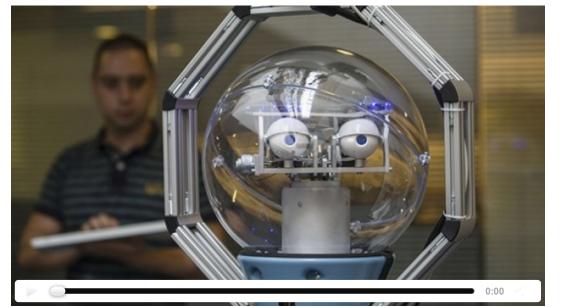
"Current robots aren't very good with their hands, or able to manipulate objects, however Bob is good at driving around and monitoring objects, so is perfect for a job in security as a night or day watchman where he can monitor what is going on in his immediate surroundings."

Staff at the G4S headquarters became so used

to Bob that they would often talk to him if they saw him passing in the hallway, and invited their families to visit the building and have photographs taken with him.

Bob has now been returned to the University of Birmingham, where robotics scientists will be analysing the data from his trial.

More trials are expected to be carried out with robots like Bob, with the view of equipping them in the future with facial recognition, gesture recognition, license plate scanners and GPS data for autonomous roving, database access, and reporting.



Bob patrolling the G4S offices IBTimes UK

A similar robot to Bob, called Werner, was deployed to a care home in Vienna, Austria.

However, in addition to helping to monitor and secure the Haus der Barmherzigkeit buildings, he also has the ability to play simple games with the care home's residents.

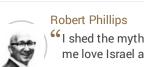
Robot security guards are already being developed in other parts of the world, such as the K5 Autonomous Data Machine by Knightscope in the US.

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