I ROBOT
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Producer: Paul Dunt

Scientists at the University of Essex are predicting that by the year 2050, robots will be so advanced that we will be able to watch a football match between a human football team and a team of humanoid robots. This week's Matter of Fact takes a closer look at the claim and meets some fascinating robots - both old and new - along the way.

Some of the most advanced robots in the world can be found in the Department of Computer Science at the University of Essex: hi-tech electronic dogs. Created by the Sony Corporation, these hounds are being programmed to understand the rules of football, recognise the ball, the goal and to understand team tactics.

Dr Vic Callaghan, University of Essex, says,

“If you were ever able to produce a robotic football team that was able to take on the best human football team and beat it, then of course you’d have succeeded in making a machine that in many important respects was able to replicate a lot of human functionality.”

The programme also uncovers the extraordinary story of Grey Walter, a British scientist who developed a robot that could respond to light and touch as far back as 1951. Walter was ahead of his time, but sadly his invention, named 'The Tortoise', failed to win financial backing and was put away in a cupboard and forgotten until now.

Owen Holland of the University of Essex says,

"If we’d paid more attention to what Grey Walter had done, we would be 20 years possibly further on than where we are now."

Making a star appearance in the programme is a robot made famous by Hitch-Hikers Guide to the Galaxy: Marvin, 'the paranoid android'. Marvin takes a tour around the East of England, meeting Peterborough United ('Posh') players, school children in Norwich, and finally joins another famous robot, one of the deadly Daleks, at a scrapyard in Ipswich.

The programme is narrated by actor Stephen Moore, who played Marvin's voice in the Hitch-Hikers Guide to the Galaxy series on TV and radio.