

Rise of the Trimbot: The green-fingered robotic gardener..

by **STEPHEN DEAL**

SCIENTISTS have created a green-fingered robot that can prune roses and trim bushes - making light work of gardening chores.

Trimbot uses mapping technology to find its way around the garden and performs horticultural tasks with its advanced cutting tools.

Developers fitted five pairs of cameras and a flexible robotic arm to an automated lawnmower, made by electronics company Bosch.

They created algorithms that enable the robot to compare overgrown bushes with ideal final shapes as it trims, and it can prune roses by pinpointing the exact part of each plant's stem that should be cut.

The battery-powered device is pre-programmed with a rough outline of a garden to aid navigation and data captured by the robot's 3D cameras enable it to perform specific tasks.

The team behind the Trimbot project, co-ordinated by Edinburgh University researchers, said prototypes could be used to maintain communal green spaces, support farmers and help people

environmental conditions.'

The four-year project was funded by the European Union's Horizon 2020 programme and involved scientists from Bosch and European universities.



Cut above: Trimbot gets to work pruning the roses, inset

with mobility issues tend their gardens. Prof Bob Fisher, from the university's school of informatics, said: 'Getting the robot to work reliably in a real garden was a feat of engineering.'

'The eight partner teams developed new robotics and 3D computer vision

technology to enable it to work outdoors in changing lighting and

