

Interface - The knowledge connection for business Helps improve efficiency of robotic bird deterrent

Bird control is an issue across the country. Organisations and authorities employ a range of different measures to deter birds away from buildings, farmland, etc. which result in varying degrees of success.

Nets and spikes are often selected as a long term solution, but this can prove to be a costly (and unsightly) option when applied to large areas or buildings.

Robop is a whole new approach to bird control. It is a robotic bird deterrent that looks, moves and sounds like a peregrine falcon. Its objective is to convince birds that Robop is a real peregrine falcon that has taken up residency on their territory in order to frighten off other birds.

The company was founded by Bob McIntyre, who brought together a team of experts to form Robop Ltd. in September 2001 at the Elvingston Science Centre on the outskirts of Edinburgh. The first Robop was installed on a customer site in July 2002 and since then the company has expanded internationally and Robop is now used throughout the UK and in 15 other countries with

recent orders from Italy, Canada and Chile to tackle bird issues in a range of sites, such as high tech industrial units, petrochemical plants and shopping centres.

While Robop has been successful commercially, there are some situations where it has not functioned effectively.

John Donald at Robop said: "After meeting with Interface at the Scottish Enterprise Technology Showcase event in early 2008, we initially sought their help to find technical robotics expertise to help improve the effectiveness of Robop. However, after a business review with Scottish Enterprise, we decided that a better understanding of bird behaviour was required and Interface channelled their search to find expertise in this area."

It was agreed first and foremost that Robop needed to gain a better understanding of raptor bird behaviour before any technical changes were made. This deeper insight would then help them to improve Robop's positioning and movement, and ultimately the effectiveness of the product.



For further information on Robop Ltd. please visit www.robop.co.uk

"After meeting Interface at an event we contacted them to see if they could find expertise in bird behaviour. We are delighted with the resulting collaboration with Dr Will Cresswell which is now well underway and we're applying his expertise in the development of new Robop products to help improve the product's performance in a wider range of bird control situations."

John Donald, Director, Robop Ltd.

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Interface undertook a search for expertise in this area, which resulted in interest from three universities. Following discussions, Robop decided to embark on a scientific collaboration with Dr Will Cresswell, an expert in the behavioural ecology of birds at The University of St Andrews, to help in the development of new variants of the Robop concept.

Dr Will Cresswell at The University of St Andrews added: "There is no single easy solution to bird deterrence, with different bird

species reacting in different ways to different predators, and this is often dependent on the local circumstances. Appropriate choice of a predator model, its realistic movement and location will determine the effectiveness of any bird deterrent solution. Most birds will avoid a predator model if it appears and behaves like the real thing. A detailed knowledge of both predator and prey behaviour is therefore crucial to any use of predator models as an effective local bird deterrent."

A collaboration agreement was signed in March 2009, which will see The University of St. Andrews receiving royalties on all future Robop sales in return for their consultancy services.

Trials with an experimental ground flying Robop are currently underway at the University and a prototype hide where Robop pops out automatically has also been developed.



About Interface - The knowledge connection for business

There is a wealth of world-class technology, skills and research facilities available within Scotland's universities and research institutes.

With established links to thousands of world-class leading experts, Interface finds and introduces companies to the perfect academic partner.

Interface overcomes the challenge facing companies in understanding what is available or who to contact

in academia, for R&D or expertise capabilities by matching relevant expertise to specific business requirements.

Collaborating with academic partners brings significant business benefits:

- Develop innovative new products, services and processes
- Improve performance using technological advances
- Increase competitive advantage in key markets

- Enhance profitability in existing and new markets

Many companies don't know that innovative solutions to help their business grow can be developed with academic assistance.

Interface is here to help make the right connections for businesses.

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