

Security system gives us a view of the future

by SIMON BERRILL

IT'S A classic dilemma, and one the British have never been good at solving: how to turn academic research into a saleable product.

But now Essex University could be coming up with an answer by allowing some of its expert staff to set up their own companies.

That's how Netcam came into being to develop and market a revolutionary new security camera system – and, if it is a success, others could follow.

Netcam grew out of research on robotics being carried out by the university's department of computer science.

The idea, explains Dr Vic Callaghan, who now divides his time between running the company and lecturing at the university, was to control mobile robots in one part of the country from somewhere else.

What the researchers realised they could do was to use existing computer networks, like the Internet, to send and receive information.

"We realised we had the ability to use the same networks to connect machines together," said Dr Callaghan.

One aspect of the research was that for a robot to be under effective control it needed to be able to send back visual signals – in other words it needed to be fitted with a video camera.

And Dr Callaghan and his team realised this had commercial implications.

"We pulled out that part of the research out and that formed our first product," he said. The product, effectively, is a small black box named SuperVisor that enables cameras to be connected directly to a computer network, without the need for them to be plugged into a PC.

This method of connecting them brings a string of advantages. Conventional security cameras, once fixed, are difficult to move.

There are also limits on the number that can be run from one system.

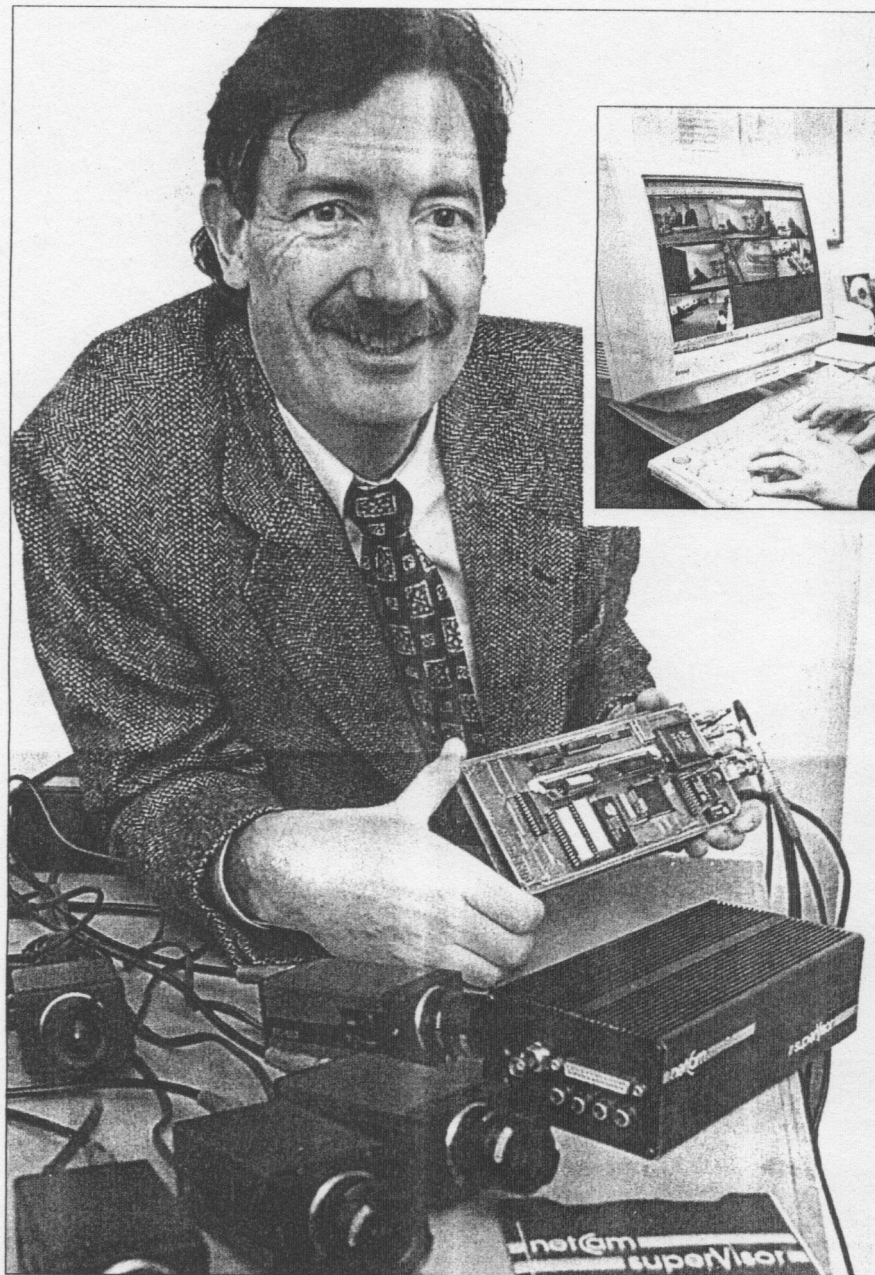
SuperVisor, now being marketed by Clearview Systems of Chelmsford, is a flexible system that can cope with as many as 50 cameras. "Anywhere there is a network you can put a camera," said Dr Callaghan. "And anyone who has a PC anywhere on that network can look at the cameras."

The system is currently being demonstrated at Colne High School in Brightlingsea, where teachers can take turns to watch the music room and the gym, where the most valuable equipment is stored, from the PCs in their offices. Views from up to nine cameras can be watched at once and the computing power of the system can also be used to provide alarm systems that operate, for example, if a camera detects movement or if it is tampered with. But the technology behind SuperVisor is capable of a great deal more. It could eventually be used to create the "intelligent buildings" predicted as the houses and offices of the future.

This becomes possible as the appliances we have in our homes – video recorders, washing machines, central heating controls – get "smarter".

"It's inevitable that if you buy one of these products there's a computer inside," said Dr Callaghan. "At the moment they are not really connected together, but there is the potential to connect them together and that creates a lot of possibilities."

"You could, for example, connect to the



TAKING CARE OF BUSINESS: Dr Callaghan with the CCTV SuperVisor unit and cameras, left, and Paul Chernet, above, with a video management system

Photographs: NICKY LEWIN

'Trying to get money out of people in the UK is like trying to get blood out of a stone... people are so cautious and conservative'

Dr Vic Callaghan

network and switch on your video or your central heating. And if there was a problem with one of these things your house could actually tell you about it."

It is an area being closely studied by computer giants Microsoft and IBM already looking at it.

"We are listening to those companies and looking at this market," said Dr Callaghan.

It has taken Netcam the best part of two years to set itself up as a fledgling busi-

ness. "It's the age-old UK problem: 'How do you exploit the research that's going on in the universities?'" said Dr Callaghan.

"This is a 'little experiment' by Essex University. It has taken us about a year to move through the university system and almost the same amount of time to move through the commercial world."

Netcam now has one full-time employee at its offices in Wivenhoe, plus Dr

Callaghan. Then there is the American connection – because to get itself off the ground Netcam has had to rely on the power of the mighty dollar.

It means the US, where the company has a small office in Arizona, will be the main market for the company's products. Soon SuperVisor will go on display at the world's biggest security industry trade show in Las Vegas.

The American link was established simply because of the need for finance

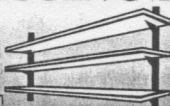
"Trying to get money out of people in the UK is like trying to get blood out of a stone," he said. "People are so cautious and conservative."

The USA was a lot more responsive and much more willing to go with the explanation we gave and their own launches. It's one unfortunate British tradition Dr Callaghan and his team were unable to overcome – but they are hoping their American partners will enable them to get round it.

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