



**WITH SUPPORT FROM EUROPE, TELEVIRTUAL
HAVE SET OUT TO QUITE LITERALLY CHANGE
THE FACE OF COMPUTING**

With computer-generated avatars such as Angel and Ava, the company aim to bridge the gap between the real world and the world of computer animation

**UK/SHELP can help
you access EC funding
for your project**

**UK/SHELP support
services include:**

Website

Database

Events

Publications

Support line

Public Relations

Telephone

+44 (0) 870 606 1515

Email

help@ukishelp.co.uk

Website

www.ukishelp.co.uk



Televirtual, originally a division of Broadsword Television, was set up in 1993 to investigate new ways of making television programmes. The first result was "Ratz the Cat" for the BBC. This relied on imported VActor software from SimGraphics in the USA which had previously been used to produce live presentations involving the Nintendo Super Mario Brothers characters. The software ran on high-end super-computers, was complex to operate and expensive to use. As Mark Wells, Research Director, recalls: *"Even the BBC found it difficult to fund production. We wanted cheaper, practical solutions that offered good results economically. That was the motivation behind our involvement with the Independent Television Commission in our first EU project. MIRAGE developed simple Virtual Studio systems using the best available, affordable, PC technology of the time. The technology was suddenly in the reach of regional, local or independent producers."*

Just as Broadsword's early venture into technology - enabled television (a long-running children's fantasy adventure game show called Nightmare) eventually suffered from comparison with the state-of-the-art in animation for the cinema, so too the initial Virtual Studio systems proved unable to keep up with the producer's and the audience's expectation. Hollywood today can use animations to do almost anything - but that is because the effects are being created off-line. TV is essentially a live medium and needs real-time systems to allow audiences and viewers to interact with animations. This realisation led Mark and his colleagues at Televirtual to explore a new kind of virtual environment, populated by avatars - virtual representations of real people.

Having achieved a high profile through MIRAGE, the company was able to attract highly qualified employees from a number of related disciplines. By the end of the decade they had the experience, the contacts and the confidence to start to develop the systems they wanted. Three proposals for funding from the Fifth Framework (1998-2002) were subsequently successful. VISICAST, CHARISMATIC and MYTHE all build on the development of Virtual Humans in one way or another. The opportunity provided by these projects is easy to understand - collaboration enables the company to concentrate on what they are good at.

"Our skills lie in animation and character design," says Mark. "Increasingly, we now want our animations to be able to hold their own in interactive dialogue with each other or with humans. That needs natural language processing and speech generation capabilities, which we'd be crazy to try to re-invent. Collaboration has put us in contact with the leaders in those fields too."

It is important that partners brought together within a consortium understand each other's commercial motivation and some partners will often be more interested in the underlying technology being developed than in the end product. The right project will give access to a body of expertise and technology that can be exploited in a number of ways.

Although he acknowledges that collaborative projects can place considerable pressures on small companies - in terms of cashflow, bureaucracy and the risk of being diverted from your primary objectives - Mark concludes on a positive note. *"We believe we now have the state of the art software environment for handling virtual humans - Avatars - in real time."* he says.

"It's been proven in use on UK television and elsewhere and our involvement in EC-supported collaborative projects undoubtedly helped speed up the rate at which we achieved our goal." BT's Talk Zone at the Millennium Dome provided an opportunity to prove the concept, with its inhabitants built and animated through an alliance between Televirtual and Avatar-Me, another UK company active in European research.



TELEVIRTUAL *The goal is for avatars to be able to hold their own in interactive dialogue with each other or with humans*



Contact

Email gen@televirtual.com

Web www.televirtual.com