

# Technology update

This section offers a round-up of some of the exciting technologies that could make the leap from innovative novelties for pioneers to cornerstones of modern life for the masses. Could these technologies revolutionise our everyday lives? You decide...

## Staying safe online

The National University of Singapore has developed Petimos, interactive 'social robots' that have been designed to help protect children when they make friends online. Due to be launched in late 2010, they are aimed at 7 to 10 year-olds and work by notifying parents each time a friend request is made (parents can then block approaches that concern them). While the devices will initially only be used with the social network Petimo-World, the developers hope that they will eventually be used to provide safer access to other sites such as Facebook and MySpace.

[www.mixedreality.nus.edu.sg/cutecenter/images/news/petimo/89-cheok-demo\\_idc\\_demo\\_paper.pdf](http://www.mixedreality.nus.edu.sg/cutecenter/images/news/petimo/89-cheok-demo_idc_demo_paper.pdf)



National University of Singapore

## Going places

Microsoft's Mobile Surface is a small portable computer that can transform any surface such as a coffee table or a piece of paper into a multi-touch interactive display. Using a computer, projector and camera, it projects an image onto a surface and detects movement in between the projector and the image which the computer then translates into actions. It could, for example, allow customers in a restaurant to scroll through the menu and interact with it, as well as make orders.

[research.microsoft.com/en-us/projects/mobilesurface/](http://research.microsoft.com/en-us/projects/mobilesurface/)



Microsoft Research

## Picture perfect

Researchers at the University of California, San Diego in the USA have developed a new type of photo-editing software that knows what your family and friends look like, and so can improve blurry snaps of them to make them worth keeping. The system uses face recognition technology to compare faces in 'good' and 'bad' photographs, and so correct 'bad' photos. The ambient features (colour and light etc) are also copied from the model photo.

[www.newscientist.com/article/mg20627595.200-facesaving-software-rescues-bad-snaps.html](http://www.newscientist.com/article/mg20627595.200-facesaving-software-rescues-bad-snaps.html)



## Another dimension

Projected to be available by March 2011, Nintendo have announced a new version of the portable DS games console, the 3DS. As you'd expect from the name, it allows games to be enjoyed with 3D effects - but without the need for special glasses. It is reported that the 3DS will include two cameras (one backward-facing, one forward-facing) and will be compatible with both DS and DSi games.

[www.youtube.com/watch?v=v\\_P4gyjf5tQ](http://www.youtube.com/watch?v=v_P4gyjf5tQ)



Nintendo

## Transforming transplants

Researchers at the University of British Columbia in Canada have developed a synthetic version of the super-elastic molecules that stop our muscles from overloading - and hope that they might be used to make artificial body parts for transplantation. They work by being 'springy' when stretched with moderate force, but they soak up energy and don't allow overstretching when subjected to greater forces.

[www.chem.ubc.ca/faculty/hongbin/group/groupage.htm](http://www.chem.ubc.ca/faculty/hongbin/group/groupage.htm)



## Private and confidential

A new communications technology has been designed by the University of New South Wales in Australia to ensure that messages are only read by their intended recipients. More accurately, only receivers in a very specific location can see the message and the system (which uses quantum communications) relies on verification from the intended recipient - making it very difficult to intercept messages.

[www.cosmosmagazine.com/news/3432/banking-safer-quantum-communication](http://www.cosmosmagazine.com/news/3432/banking-safer-quantum-communication)

