



Computer technology: robotic milking and interactive mirrors

Mirrors as interactive art

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Okay. So this is the wooden mirror. It's a large display. It's made out of 835 of these wooden tiles. And optically the way you get the image, is when the little tiles tilt downward they get to be dark. And when tilt upwards, they hit the light like this one here, and they get to be bright. These are all motorised, so they can move up and down controlled by the computer, like so.

And on top of these, on the ceiling, are spotlights aimed down at a steep angle. That's how we get a good contrast on the display.

There are several motors that are actually moving these wooden pixels. Can position them from very down probably thirty degrees pointing down to about three degrees pointing upwards.

In the centre of the piece, more or less at eyesight of a typical average person, is a tiny camera. It's hiding here between four of the wooden chips.

That video camera is capturing the image of whoever or whatever stands in front. That video signal is then sent to a computer, and that image is then evaluated in greyscale, in black and white values. Where each black and white value actually corresponds to an angle of one of these wooden pixels.

A video signal usually contains like five hundred thousand pixels. A lot of pixels. And my system only uses 835 of those. And that is done by the digitiser on the computer. The system is quite fast, so it refreshes itself probably fifteen or twenty times a second. So it yields sort of a smooth animation.