

Making computers that treat you right

Computing is about people. Sure, you need technical knowledge, but in order to make a successful gadget or design a bestselling app, you have to know how people work too. Your users have to enjoy using your invention. Fortunately, there's an entire field of computer science dedicated to improving the experience of using a computer. Human-computer interaction combines technical know-how with psychology, inventiveness and artistry.

In this issue we're exploring how designers make computers that feel good to use. You'll read about eating cookies in virtual reality, controlling computers by harnessing invisible airborne electricity and falling in love over video chat. Dive in!

Delicious computing

Imagine being able to pick up an ordinary banana and use it as a phone.

That's part of the vision of 'invoked computing', which is being developed by Japanese researchers. A lot of the computers in our lives are camouflaged – smartphones are more like computers than phones, after all – but invoked computing would mean that computers would be everywhere and nowhere at the same time.

The idea is that in the future, computer systems could monitor an entire environment, watching your movements. Whenever you wanted to interact with a computer, you would just need to make a gesture. For example, if you picked up a banana and held one end to your ear and the other to your mouth, the computer would guess that you wanted to use the phone. It would then use a fancy speaker

system to direct the sound, so you would even hear the phone call as though it were coming from the banana.

Sometimes you might find yourself needing a bit more computing power, though, right? Not to worry. You can make yourself a laptop if you just find an old pizza box. Lift the lid and the system will project the video and sound straight on to the box.

At the moment the banana phone and pizza box laptop are the only ways that

you can use invoked computing in the researchers' system, but they hope to expand it so that you can use other objects. Then, rather than having to learn how to use your computers, your computers will have to learn how you would like to use them. And when you are finished using your phone, you could eat it.

