



GESTURE CONTROL TECHNOLOGY

DISCOVERY

The pace of innovation in computers is accelerating. Over the last few decades, processing power has doubled every 18 months.

The way we *interact* with computers, however, has not changed drastically. We still generally use the decades-old technology of a mouse and keyboard.

But recent innovations are changing this. Touchscreen devices, such as tablets and smartphones, have changed how we interface with information.

One striking new development is *gesture control*. This is the process of using body movements to control a computer or other electronic device. A number of mainstream consumer systems incorporate this technology, such as Microsoft's Kinect and Sony's Move.



INNOVATION

Next-generation gesture control technologies include the [MYO Armband](#) by Thalmic Labs, a Waterloo-based company. Distinct from other gesture-control devices, which use cameras and image-processing software, the MYO Armband is based on an array of sensors that detect the contraction and expansion of muscles in the forearm. Those movements are translated into instructions for the computer.

 THALMICLABS



IMAGINATION

The possible ways we could interact with computers seem endless. Can you think of new technologies that go beyond the old mouse-and-keyboard interface? How do you think we'll use computers 20 years from now, or 100 years from now?

