

Wearable tech 可穿戴技术

Vocabulary: technology 词汇: 科技

As the old saying goes, necessity is the mother of invention. A tragic event in India – the gang rape of a young woman – led engineering students to develop a bra that can deliver a 3800kv electric shock to any would-be attacker.

Manisha Mohan, from the SRM University in Chennai, says that it can also send a text message to the local police station with the GPS coordinates of the victim's location.



Will normal clothes be a thing of the past?

The bra is fitted with a pressure sensor connected to an electric circuit. But layers of fabric and precise calibration ensure that the device won't harm the wearer nor be triggered by a friendly hug.

On the other side of the world, the possibilities offered by wearable technology are inspiring a University of Colorado PhD student to design a dress that will help deaf people by recognising vibrations.

Halley Profita, who was interviewed by BBC's Fiona Graham, points out that people with disabilities avoid using some products, such as hearing aids, because they call attention to them. She says: "We look at developing products that are both aesthetic and functional."

Her creation, called Flutter, is still at the research stage. Ms Profita hopes to start testing it out on people later this year. She wants the system to be foolproof.

Some designers aim to have people expressing themselves more through their garments. A California-based start-up called Machina wants people not only to look good but also to sound good. It is using skilled Mexican artisans to handcraft a jacket that makes music.

Linda Franco is one of Machina's founders. She says that her inspiration came from seeing a musician make music just by using his computer and explains: "We wanted to bring the act of performance back to life by having the musician use his body as an interface."

Embedded in the fabric are electronic components which can detect the position of the wearer's fingers and track the movement of their arms, a joystick and four push buttons.

Experiments with the hardware are promising, but how comfortable people will be interacting with their clothes is still to be seen. How ready are you to actually wear your computer?

词汇表请参看答案与词汇部分

Quiz 测验

阅读短文并回答问题。

1. How can Manisha Mohan's invention prevent rape?
2. What will make the special bra harmless to the wearer?
3. Is this statement true or false? *Ms Profita's dress is foolproof.*
4. What inspired Linda Franco to produce a jacket that makes music?
5. Which expression means "pleasing to the eye"?

Exercise 练习

请你在不参考课文的情况下完成下列练习。从每个表格中选择一个意思合适的单词填入句子的空格处。

1. Children should play far from plugs or they might end up getting _____.

a calibration	an electric shock	hardware	an interface
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2. It is said that animals flee before earthquakes because they are sensitive to _____ on the ground.

vibrations	GPS coordinates	sensors	hardware
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3. The forest I'm about to enter is very dense. If I get lost, try to find me by my _____.

electric circuit	joystick	calibration	GPS coordinates
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4. My jacket _____ with pads to make shoulders look sharper and more elegant.

is detected	is fitted	has interacted	is foolproof
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5. A hearing aid is a _____ that people who are hard of hearing put behind their ears.

device	push button	joystick	garment
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Answers and Glossary 答案与词汇

Quiz 小测验

1. How can Manisha Mohan's invention prevent rape? **By delivering an electric shock to the would-be attacker and informing the police of the location of the victim.**
2. What will make the special bra harmless to the wearer? **Layers of fabric and precise calibration.**
3. Is this statement true or false? *Ms Profita's dress is foolproof.* **False. Ms Profita wants to test the garment on people to make sure it is easy to use and effective.**
4. What inspired Linda Franco to produce a jacket that makes music? **The sight of a man playing music through his computer at a concert.**
5. Which expression means "pleasing to the eye"? **Aesthetic.**

Exercise 练习

1. Children should play far from plugs or they might end up getting an electric shock.
2. It is said that animals flee before earthquakes because they are sensitive to vibrations on the ground.
3. The forest I'm about to enter is very dense. If I get lost, try to find me by my GPS coordinates.
4. My jacket is fitted with pads to make shoulders look sharper and more elegant.
5. A hearing aid is a device that people who are hard of hearing put behind their ears.

Glossary 词汇表

an invention	发明，创造
engineering	工程学的
an electric shock	电击
a text message	一条短信
the GPS coordinates	全球定位系统坐标
a sensor	一个传感器
an electric circuit	一个电路
calibration	精确测量
a device	一个装置、设备
vibrations	震动
aesthetic	美的
functional	实用的
to be foolproof	万无一失的，容易操作的
an artisan	一名手工艺者、工匠
an interface	一个界面
to embed	嵌入、插入
an electronic component	一个电子零件
a joystick	一个操纵杆
a push button	一个按钮
hardware	硬件