

Hawking's speech software goes open source for disabled

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British theoretical physicist and professor Stephen Hawking speaks at an Intel press conference in London on December 2, 2014

The system that helps Stephen Hawking communicate with the outside world will be made available online from January in a move that could help millions of motor neurone disease sufferers, scientists said Tuesday.

The wheelchair-bound [theoretical physicist](#), who shot to international fame in the 1980s with his book "A Brief History of Time", hailed the decision by US tech giant Intel at a press conference in London.

"By making this technology freely available, it has the potential to greatly improve the life of disabled people all over the world," said Hawking, his words relayed by the robotic voice of his computer.

"Without this, I would not be able to speak to you today," said the 72-year-old, who was diagnosed at the age of 21 with a motor neurone disease related to [amyotrophic lateral sclerosis](#) (ALS).

The [communications system](#) will be made available to researchers on the Internet as "open source", although it would still have to be adapted for individual users.

Hawking, who teaches at Cambridge University, can write on his computer using a cheek sensor which is detected by an infrared switch mounted to his glasses and helps him select characters.

His current system, developed by Intel over the past three years, reduces the number of moves needed to spell out words, as well as giving him new functions for the first time such as sending email attachments.

"Hawking's typing speed is twice as fast and there is a tenfold improvement in common tasks," Intel said in a statement.

The British company SwiftKey has also digitized all his works to help the computer guess more quickly what he is trying to say.

Hawking, who is almost entirely paralysed, demonstrated the new system in public for the first time on Tuesday.

In a press release, he said: "Medicine has not been able to cure me, so I rely on technology to help me communicate and live."

Quadriplegia and [motor neurone disease](#) affect over three million people worldwide.

Lama Nachman of Intel Labs said: "Technology for the disabled is often a proving ground for the technology of the future."

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