News Puzzle ②

FirstNews • Issue 721 • 10 - 16 April 2020

This story is from page 9 of *First News*. Read the story, and then try the puzzle. To help you, we have underlined the answers to the crossword puzzle clues in the story itself – but you will need to match the correct word with each clue!

SCIENCE NEWS



SCIENTISTS in America have developed artificial intelligence (AI) that can translate brain activity into words.

Four volunteers at the University of California had <u>electrode arrays</u> implanted in their brains. These devices measure what goes on inside the brain.

The <u>participants</u> had to read 50 sentences aloud several times, while scientists monitored their brain activity.

The <u>data</u> was <u>inserted</u> into an AI system that turned it into a list of numbers. This was then fed into another part of the <u>AI</u> system that decoded those numbers into words.

The results were impressive, but not perfect. One sentence

read aloud was "Those musicians harmonise marvellously," but the AI translated it as "The <u>spinach</u> was a famous singer"!

Overall, though, scientists were very happy with the Al's accuracy; for one participant, only 3% of translated sentences needed correcting.

The AI was only working with 50 set sentences, though. It can't quite translate random sentences yet. And without <u>implanted</u> electrode arrays, there's no risk of your mind being read any time soon!

ACROSS

 To change words in to a different language (present participle 9)

 Placed or fitted something into place (past participle 8)

5) Devices that stimulate nerve fibres in the brain

- to send or obtain neural signals (plural noun 9, 6)
- 7) Inserted or fixed into the body (past participle 9)

DOWN

- 1) People taking part in something (plural noun 12)
- 3) Scan hip (anagram) (noun 7)
- 6) Statistics collected for analysis (noun 4)
- 8) The theory and development of computer
- systems able to perform tasks normally requiring a

human mind (noun 2)





News Puzzle 🛞

FirstNews • Issue 721 • 10 - 16 April 2020

This story is from page 9 of *First News*. Read the story, and then try the puzzle. The answers to the clues are all words in the story. Answer the clue and then underline the word in the story.

SCIENCE NEWS



SCIENTISTS in America have developed artificial intelligence (AI) that can translate brain activity into words.

Four volunteers at the University of California had electrode arrays implanted in their brains. These devices measure what goes on inside the brain.

The participants had to read 50 sentences aloud several times, while scientists monitored their brain activity.

The data was inserted into an AI system that turned it into a list of numbers. This was then fed into another part of the AI system that decoded those numbers into words.

The results were impressive, but not perfect. One sentence

read aloud was "Those musicians harmonise marvellously," but the AI translated it as "The spinach was a famous singer"!

Overall, though, scientists were very happy with the Al's accuracy; for one participant, only 3% of translated sentences needed correcting.

The AI was only working with 50 set sentences, though. It can't quite translate random sentences yet. And without implanted electrode arrays, there's no risk of your mind being read any time soon!

ACROSS

2) To change words in to a different language (present participle 9)

4) Placed or fitted something into place (past participle 8)

5) Devices that stimulate nerve fibres in the brain

- to send or obtain neural signals (plural noun 9, 6)
- 7) Inserted or fixed into the body (past participle 9)

DOWN

- 1) People taking part in something (plural noun 12)
- 3) Scan hip (anagram) (noun 7)
- 6) Statistics collected for analysis (noun 4)
- 8) The theory and development of computer
- systems able to perform tasks normally requiring a

human mind (noun 2)



