New gym opens to train robots

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A group of business people has opened a kind of gym for robots. The group is headed by Elon Musk, who is the boss of the electric car company Tesla Motors and the space tourism company, SpaceX. Mr Musk also founded the online payments website PayPal. His latest project is called OpenAI Gym. It is a platform for researchers and code writers to test their latest work. It is an open platform, which means people are free to test their ideas for artificial intelligence (A.I.) on it. In particular, researchers can test and share their algorithms for A.I. Algorithms are special sets of rules in a computer program that can solve problems and quickly deal with large amounts of information.

Mr Musk wrote about the OpenAI Gym project and why his team decided to put it online for free. He said: "Our goal is to advance digital intelligence in the way that is most likely to benefit humanity as a whole, [without the] need to generate financial return." The OpenAI Gym follows the idea of giving rewards for successful learning – similar to giving a dog a treat when it learns something new. This is called reinforcement learning. If an algorithm does well in the gym, it gets a reward. If the algorithm fails, it gets no reward and it has to try something different. The aim of gym is to develop an algorithm that can multi-task - do many things at the same time - rather than be good at doing just one thing.

Sources: *Science Explorer / Computer World / Daily Mail*

Writing

Artificial intelligence and robots are dangerous to humans. Discuss.

Chat

Talk about these words from the article.

business / gym / electric car / tourism / payments / platform / artificial intelligence / project / online / humanity / financial / rewards / learning / fails / multi-task

True / False

a) The boss of the new gym also runs a space tourism company. T / F

b) The new gym is free for anyone to use. T / F

c) The system the gym uses is called a closed platform. T / F

d) Algorithms are very slow at solving problems. T / F

e) The boss wants the gym to develop humanity as a whole. T / F

f) The idea behind the gym is similar to giving a dog rewards for learning. T / F

g) An algorithm will get a reward if it fails a task. T / F

h) The boss wants algorithms to do just one thing well. T / F

Synonym Match

1.	kind	a.	concepts
2	boss	b.	forward
3.	latest	c.	invent
4.	ideas	d.	chief
5.	deal with	e.	aim
6.	goal	f.	people
7.	advance	g.	type
8.	humanity	h.	manage
9.	develop	i.	only
10.	just	j.	most recent

Discussion – Student A

a) Should more stuff online be free?

b) How can digital intelligence help us?

c) How will computers 'benefit humanity as a whole'?

d) What rewards do you get?

e) What do you think of 'reinforcement learning'?

f) When do you multi-task?

g) What things are you best at?

h) What questions would you like to ask Elon Musk?

Phrase Match

1. space
2. code
3. artificial
4. a computer program that can solve
5. quickly deal with large
6. put it online
7. benefit humanity as
8. giving
9. If the algorithm fails,
10. develop an algorithm that

a. for free
b. problems
c. can multi-task
d. tourism
e. a whole
f. intelligence
g. it gets no reward
h. amounts of information
i. writers
j. rewards

Discussion – Student B

a) What do you think about what you read?
b) What do you know about Elon Musk?
c) What do you think about robots?
d) How important are gyms to you?
e) What would a robot do in a gym?
f) What do you think of artificial intelligence?
g) What do you know about algorithms?
h) How good are you with computers and coding?

Spelling

1. the space rtimsuo company, SpaceX
2. It is an open plrtmoaf
3. ciiralifat intelligence (A.I.)
4. In aricrutpal, researchers can…
5. elsvo problems
6. large ntoasmu of information
7. ncvaaed digital intelligence
8. most likely to benefit imhynuat
9. generate nicfainla return
10. lccfuseuss learning
11. it gets a rwraed
12. vlodeep an algorithm

Role Play

Role A – Learning English
You think robots will be most useful at helping us learn English. Tell the others three reasons why. Tell them things that are wrong with their ideas. Also, tell the others which is the least likely of these (and why): solving climate change, making money or looking after babies.

Role B – Solving climate change
You think robots will be most useful at solving climate change: Tell the others three reasons why. Tell them things that are wrong with their ideas. Also, tell the others which is the least likely of these (and why): learning English, making money or looking after babies.

Role C – Looking after babies
You think robots will be most useful at looking after babies. Tell the others three reasons why. Tell them things that are wrong with their ideas. Also, tell the others which is the least likely of these (and why): solving climate change, learning English or making money.

Role D – Making money
You think robots will be most useful at helping us lean English. Tell the others three reasons why. Tell them things that are wrong with their ideas. Also, tell the others which is the least likely of these (and why): solving climate change, looking after babies or learning English.

Speaking – Help

Rank these with your partner. Put the things robots can help us with most at the top. Change partners often and share your rankings.

- learning English
- cleaning the home
- building houses
- healthcare
- care for the elderly
- making money
- looking after babies
- solving climate change

Answers – Synonym Match

1. g	2. d	3. j	4. a	5. h
6. e	7. b	8. f	9. c	10. i

Answers – True False

a T	b T	c F	d F	e T	f T	g F	h F

Answers to Phrase Match and Spelling are in the text.