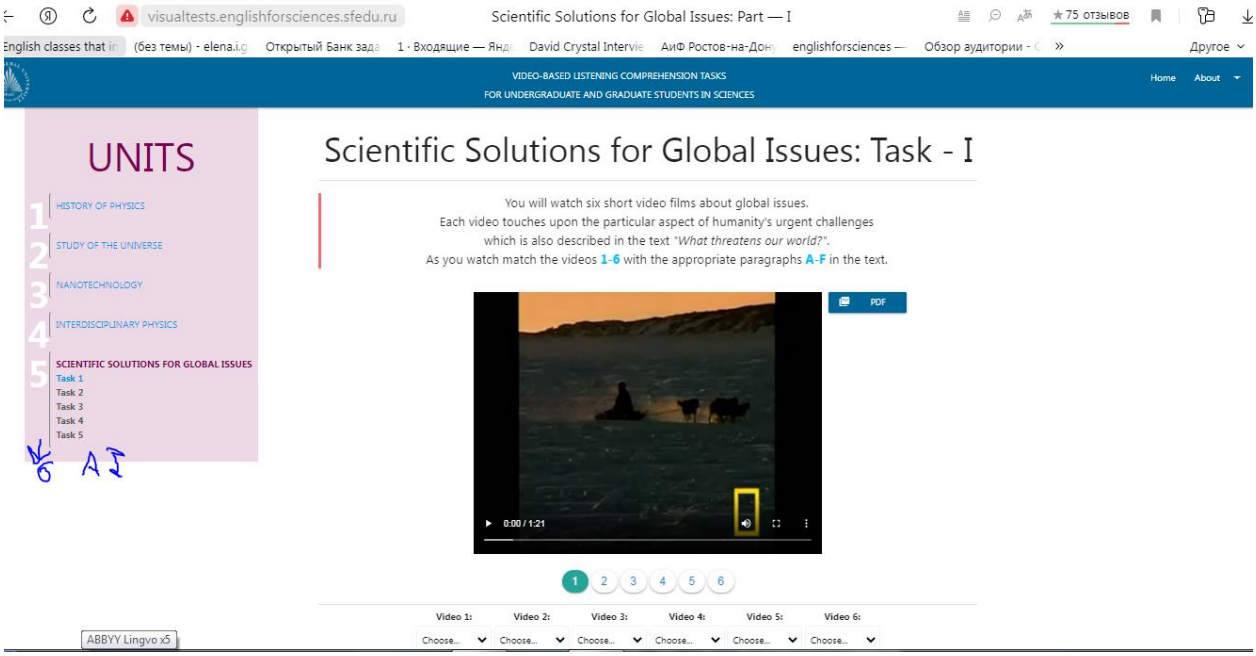
Программа повышения квалификации «Искусственный интеллект: математические модели и прикладные решения»

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После завершения данной программы для дисциплины «Иностранный язык для профессиональной коммуникации» планируется к новому учебному году добавить к существующему авторскому онлайн курсу VIDEO-BASED LISTENING COMPREHENSION TASKS FOR UNDERGRADUATE AND GRADUATE STUDENTS IN SCIENCES http://visualtests.englishforsciences.sfedu.ru/ - **Unit 6 Artificial Intelligence**

После Unit 5 - http://visualtests.englishforsciences.sfedu.ru/tests.php?title=4&part=0



Будет добавлен Unit 6 Artificial Intelligence с 5 разделами с заданиями для развития навыков аудирования на основе тематического видео по аналогии с существующими пятью юнитами.

Artificial Intelligence: Task - I

You will watch six short video films about Artificial Intelligence.

Each video touches upon the particular aspect of AI which is also described in the text "*Artificial Intelligence - what it is and why it matters?*"

As you watch match the videos 1-6 with the appropriate paragraphs A-G in the text.

Artificial Intelligence - what it is and why it matters

A) Artificial intelligence (AI) is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence.

B) The birth of the artificial intelligence conversation was denoted by Alan Turing's seminal work, "Computing Machinery and Intelligence", which was published in 1950. In the paper, Turing—famous for breaking the Nazi's ENIGMA code during WWII—proposes to answer the question 'can machines think?' and introduces the Turing Test to determine if a computer can demonstrate the same intelligence or the results of the same intelligence as a human. While the "Turing Test" has undergone much scrutiny since its publication, it remains an important part of the history of AI. Turing's paper "Computing Machinery and Intelligence" and its subsequent Turing Test, established the fundamental goal and vision of artificial intelligence.

C) The term “AI” was first coined at Dartmouth college in 1956 by a scientist called Marvin Minsky. Early AI research in the 1950s explored topics like problem solving and symbolic methods. In the 1960s, the US Department of Defense took interest in this type of work and began training computers to mimic basic human reasoning. For example, the Defense Advanced Research Projects Agency (DARPA) completed street mapping projects in the 1970s. And DARPA produced intelligent personal assistants in 2003, long before Siri, Alexa or Cortana were household names. But AI has become more popular today thanks to increased data volumes, advanced algorithms, and improvements in computing power and storage.

D) Artificial Intelligence has grown to be very popular in today’s world. It is the simulation of natural intelligence in machines that are programmed to learn and mimic the actions of humans. These machines are able to learn with experience and perform human-like tasks. As technologies such as AI continue to grow, they will have a great impact on our quality of life. It’s but natural that everyone today wants to connect with AI technology somehow, may it be as an end-user or pursuing a career in Artificial Intelligence.

E) To understand How Artificial Intelligence actually works, one needs to deep dive into the various sub-domains of AI and understand how those domains could be applied to the various fields of the industry.

Machine Learning: ML teaches a machine how to make inferences and decisions based on past experience. It identifies patterns, analyses past data to infer the meaning of these data points to reach a possible conclusion without having to involve human experience. This automation to reach conclusions by evaluating data, saves a human time for businesses and helps them make a better decision.

Deep Learning: Deep Learning is an ML technique. It teaches a machine to process inputs through layers in order to classify, infer and predict the outcome.

Neural Networks: Neural Networks work on similar principles to Human Neural cells. They are a series of algorithms that captures the relationship between various underlying variables and processes the data as a human brain does.

Natural Language Processing: NLP is a science of reading, understanding, and interpreting a language by a machine. Once a machine understands what the user intends to communicate, it responds accordingly.

Computer Vision: Computer vision algorithms try to understand an image by breaking down an image and studying different parts of the object. This helps the machine classify and learn from a set of images, to make a better output decision based on previous observations.

Cognitive Computing: Cognitive computing algorithms try to mimic a human brain by analysing text/speech/images/objects in a manner that a human does and tries to give the desired output.

F) As each day progresses, Artificial Intelligence is making rapid advancements in all fields. AI is no longer the future; it is the present! Here is a list of AI applications that you may use in everyday life:

Online shopping: Artificial intelligence is used in online shopping to provide personalised recommendations to users, based on their previous searches and purchases.

Digital personal assistants: Smartphones use AI to provide personalised services. AI assistants can answer questions and help users to organise their daily routines without a hassle.

Machine translations: AI-based language translation software provides translations, subtitling and language detection which can help users to understand other languages.

Cybersecurity: AI systems can help recognise and fight cyberattacks based on recognising patterns and backtracking the attacks.

Artificial intelligence against Covid-19: In the case of Covid-19, AI has been used in identifying outbreaks, processing healthcare claims, and tracking the spread of the disease.

G) Artificial intelligence is not only impacting the future of every industry and every human being but has also acted as the main driver of emerging technologies like big data, robotics and Internet of Things (IoT). Considering its growth rate, it will continue to act as a technological innovator for the foreseeable future.

Целью этого онлайн ресурса является - формирование эффективных навыков восприятия на слух (аудирования) контента профессиональной направленности и формирование навыков самостоятельной работы и самоконтроля усвоения знаний.