Секція 3. Науково-технічний прогрес: проблеми та перспективи

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CAN ARTIFICIAL INTELLIGENCE REPLACE HUMAN INTELLIGENCE?

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Artificial intelligence (AI) has penetrated all areas of our life, resulting in a growing fear that smart machines will soon replace many humans. For the past few years AI is one of the most commonly discussed topics even by the biggest names in science like B. Gates, E. Musk and S. Hawking. All of them warn about AI and its rapid grow. Some scientists in the AI field subscribe to the idea that at some point in the not-so-distant future, AI technology will reach and surpass human intelligence. Skeptics, on the other hand, contend that the human mind is too complex and human intelligence too nuanced to be imitated or replaced by machines [1]. These days we are able to see the quick development in the area of artificial intelligence. The role of the machines in everyday life is growing up and they do more and more tasks instead of humans. From the automation of mundane repetitive tasks to making complex decisions, the opportunities offered by AI can lead us in a variety of directions. However, while these advanced technologies can perform some tasks with higher efficiency and accuracy, human expertise still plays a critical role in designing and utilising AI technology. Human intelligence is what shapes the emergence and adoption of artificial intelligence and innovative solutions associated with it. In addition to task-performing capacities, we also need to take into account the intangibles – wit, humor, morality, ethics, free will, self-awareness, intuition, and consciousness – not to mention, the capacity to create fiction. As Yuval Noah Harari in Sapiens: A Brief History of Humankind mentions, the ability to tell stories is what pushed our species to become the masters of the planet [2].

One of the most interesting things about AI is that, unlike static code, it is programmed to learn. Self-learning and advanced training allow AI to develop strategies and concepts, to find new inferences, to extract hidden features, and to start making decisions. However, AI has problems in determining the spatial relationship between areas of a picture (pattern recognition) and identifying intentions beyond the training set (such as unforeseen decisions of a pedestrian in autonomous driving). In addition, humans feel empathy, they are creative, they are able to find unconventional approaches, and consider ethics. Computers are unbeatable when it comes to handling big data. Nevertheless, they first have to learn, whereas humans can perceive. The best ones we call geniuses, whom computers cannot replicate [3].

To conclude, artificial intelligence can achieve great discoveries and advances for humanity due to its multiple possibilities. Human brain is very complex machine which cannot be fully replaced by AI though AI can be better than brain at many tasks. Also, the utilization of artificial intelligence will surely make life even more convenient for humankind in the years to come and even force humans to evolve their skill sets, it will perhaps never be possible for such machines to completely replace the human resource.

References:

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