Identify the part of speech of the underlined words in the text.

Artificial intelligence

"<u>Artificial</u> <u>intelligence</u> (AI) is a wide-ranging branch of computer science concerned with building <u>smart</u> machines capable of performing tasks that typically <u>require</u> human intelligence. While AI is an interdisciplinary science with multiple approaches, advancements in machine learning and <u>deep</u> learning, in particular, are creating a paradigm shift in <u>virtually</u> every sector of the tech industry.

Artificial intelligence allows machines to <u>model</u>, or even improve upon, the capabilities of the human mind. <u>And</u> from the development of self-driving cars to the proliferation of generative AI tools like ChatGPT and Google's Bard, AI <u>is</u> increasingly becoming part of everyday life and an area companies across every industry are investing in."

Source: Schroer, A. (2023). *Artificial Intelligence.* Artificial Intelligence (AI): What Is AI and How Does It Work? | Built In. https://builtin.com/artificial-intelligence

---

"AI refers to the <u>simulation</u> of human intelligence by a system or a machine. The goal of AI is to develop a machine that can think like humans and <u>mimic</u> human behaviors, including perceiving, reasoning, learning, planning, predicting, and so on. Intelligence is one of the main characteristics that distinguishes human beings from animals. With the interminable occurrence of industrial revolutions, an increasing number of types of machine types continuously replace human labor from all walks of life, and the imminent replacement of human resources by machine intelligence is the next big challenge to be overcome."

Source: Xu, Y et al. (2021, October 28). *Artificial Intelligence: A powerful paradigm for scientific research.* Innovation (Cambridge (Mass.)). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8633405/

"How Artificial Intelligence (AI) is being used?

At present there is a high demand for AI <u>capabilities</u> from a great variety of industries and systems that can be used for automation, learning, legal assistance, risk notification and research.

Specific uses of AI include:

a. Health Care.
There are many AI applications <u>in</u> health institutions that can provide <u>various</u> routine tasks. For example AI machines can read personalized medicine data and X-ray readings of patients for various diseases (e.g. breast mammograms, data obtained by radiomics and biopsy slides, and lung cancer low-dose computed tomography scans). Also, AI can act as a personal health care assistant. For example: AI can act as life coach (e.g. reminding patients to take their pills), remind people to take exercise and for how long, <u>or</u> to propose to eat healthy food for reducing <u>obesity</u>.

b. Retail industry.
Artificial Intelligence computers can provide virtual shopping capabilities that offer personalized recommendations and discuss purchase options with the consumer. Companies with stock management and <u>organizational</u> problems (clothes, tools, equipment, etc) and site layout technologies will also be improved with the help of AI.

c. Manufacturing.
AI can analyze factory Internet of Things (IoT) data. The Internet of Things (IoT) is growing <u>exponentially</u>, but security for IoT projects and deployments remains an obstacle for many organizations. One fundamental IoT security component is making sure devices and services have trusted identities that can interact within secure ecosystems.

d. Life sciences.
From ensuring drug safety to getting new therapies to market faster, AI technologies can unleash the full potential of data to solve the greatest health challenges facing humanity today and in the future.

e. Banking.
Artificial Intelligence enhances the speed, precision and effectiveness of human efforts in financial institutions. AI techniques can be used to <u>identify</u> which banking transactions are likely to be fraudulent.

f. Public sector.
Artificial Intelligence can make smart cities smarter. It can support national defense with mission readiness and predictive maintenance. Europe has spent up to €700 million on robotics and public–private partnerships in the context of AI. Consequently, many AI-based applications for the public sector are emerging, promising great value with regard to workforce and <u>productivity</u>."

Source: Valavanidis, Athanasios. (2023). Artificial Intelligence (AI) Applications. The most important technology we ever develop and we must ensure it is safe and beneficial to human civilization I. 1. 1-49.