MONITORING OF THE SOCIAL NETWORK WITH THE HELP OF ARTIFICIAL INTELLIGENCE

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Abstract:

The use of artificial intelligence makes it possible to process large amounts of data, analyze texts, posts, comments, images and videos, and determine the tone and emotional color of statements. It helps to automate the monitoring process, increase the accuracy of the analysis and increase the efficiency of decision-making.

Keywords: social network monitoring, artificial intelligence, data analysis, machine learning algorithms, automation.

Artificial intelligence is the ability of artificial intelligence systems to perform cognitive functions: to learn, including from their own experience, to adapt to given parameters and perform tasks previously available only to humans (or higher animals).

The main components of artificial intelligence systems are:

✓ a knowledge base that allows searching, storing and changing information;

✓ a problem solver, that is, a block capable of finding solutions due to the strategy installed on it;

✓ a smart interface for human communication.

The main subgroups (sub-technologies) of artificial intelligence technologies include:

1) computer vision technologies;

2) natural language processing technologies;

3) speech recognition and synthesis technologies;

4) machine recommendations and decision support technology

Artificial intelligence can be used in almost all spheres of activity and provide new opportunities for people. Artificial intelligence can be used to free people from monotonous work, automate dangerous types of work, support decision-making and maintain communication between people.

artificial intelligence is intensively used for the development of URs. Relevant areas of application of artificial intelligence are all technologies and technological solutions where artificial intelligence is used as a mandatory element, in particular, robotics and control of unmanned vehicles.

Types of artificial intelligence

After considering what artificial intelligence means and why this group of technologies is so important, it is necessary to list the possible types of artificial intelligence.

In the special literature on computer science, the following types of artificial intelligence are often called:

✓ automated (capable of performing routine tasks);

✓ assistant (optimizes decisions made by a person);

✓ expanded (capable of supporting human thinking in non-standard situations);

According to the perception of the environment, artificial intelligence systems can be divided into four types.

The first type: reactive or reactive system (can sense and respond to the environment).

The second type: a system with limited memory (capable of adjusting its behavior based on previous experience).

The third type: an intelligent system (with the ability to recognize thoughts and feelings).

The fourth type: an artificial self-awareness system (it can form an image about itself and is not inferior to a person in terms of mental abilities).

Artificial intelligence is playing an increasingly important role in modern monitoring systems. It represents the science and technology that enables computer systems to imitate the human mind. Artificial intelligence opens up many opportunities to improve monitoring systems and increase the efficiency and accuracy of the data obtained.

A social media monitoring system can use artificial intelligence to analyze and process the collected data. AI algorithms help determine the emotional tone of posts, spot trends, predict user behavior, and determine legitimacy. It allows users to gain valuable insights about their audience, measure the effectiveness of marketing campaigns, and make informed decisions based on social media data analysis. Thus, collecting data from social networks is one of the main components of a social media monitoring system, and artificial intelligence plays an important role in automating and optimizing this process.

Analyzing and processing data using artificial intelligence machine learning algorithms is an important area of modern science and technology. They play a key role in making sense of large amounts of data and making decisions based on that data. One of the main tasks of data analysis is to identify relationships and patterns between different variables in a data set. Machine learning algorithms automate this process, allowing the computer to make inferences and make predictions based on the available data. The use of machine learning algorithms in data analysis has a wide range of applications. For example, in medicine, it helps to diagnose diseases based on the patient's medical information. In finance, they can be used to predict market trends and determine optimal investment strategies. In business, machine learning algorithms help analyze market and consumer behavior to formulate marketing strategies.

The following advantages can be achieved with the help of artificial intelligence in the analysis of social networks:

1. Big data: Social networks provide a huge amount of data about the behavior of users. Analyzing this data can reveal hidden illegal activities and trends.

2. Fast and efficient: The use of artificial intelligence in social media analysis allows for faster and more efficient processing and analysis of data than traditional methods.

3. Identifying influential users: Social media analysis can identify influential users who can significantly influence other users and communities.

4. Predicting User Behavior: Can predict user behavior. This can be useful for marketing and promotional purposes.

5. Anomaly and threat detection: Social media analysis supported by artificial intelligence can indicate potential threats or problems to the user.

AI-assisted social media analysis has the following limitations:

1. Data Privacy: Social network analytics using artificial intelligence may raise concerns about user data privacy. It is necessary to comply with the relevant rules and norms for the protection of personal data.

2. Incomplete Information: Some users may provide incorrect information. possible This leads to a violation of the analysis results.

3. Subjectivity of Algorithms: Artificial intelligence algorithms can be subject to subjectivity and bias. This affects the results of social network analysis.

4. Limitations of Algorithms: Some AI algorithms may be limited in their ability to analyze complex social interactions and relationships.

5. Ethical Issues: Raises ethical issues related to confidentiality, manipulation and control of user data.

Results: Automation of the process of data collection and analysis is one of the most important areas of modern information technology. This process plays an important role in many fields, including science, business, and government. Data collection is the first step in data analysis. In the past, this process required a lot of effort and resources in the form of manual data collection through surveys, questionnaires, or other means. By automating the process of data collection with the help of special programs and tools, it was possible to significantly speed up this process. Data can now be collected automatically from a variety of sources, including web pages, databases, social networks, and other sources. After the data is collected, it is analyzed. Manual analysis of large volumes of data is labor-intensive and error-prone. Therefore, the automation of this process is of great importance.

Conclusion: The development of a social media monitoring system using artificial intelligence has become a necessity with the increasing popularity of social networks and the increase in the amount of data. The combination of monitoring functions and artificial intelligence makes it possible to increase the efficiency and accuracy of data analysis, as well as facilitate the process of information processing. This system can be used in a wide range of fields, from marketing and business to scientific research and public administration.

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