Використання функціоналу Cisco Cloudlock з організаційними заходами дозволяє створити ефективну систему безпеки менеджменту безпеки хмарного середовища.

Отже менеджмент інформаційної безпеки в хмарних середовищах є одним із найважливіших напрямів корпоративного управління безпекою. Використання хмарного сервісу Cisco Cloudlock для менеджменту інформаційної безпеки забезпечує компаніям ефективний захист від загроз, контроль та управління інцидентами, контроль доступу до ресурсів та даних і відповідність стандартам і вимогам. Таким чином використання даного сервісу в системах менеджменту інформаційно безпеки дозволяє компаніям знизити ризики, підвищити довіру клієнтів та забезпечити стабільність бізнес процесів у хмарних середовищах.

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Machine learning in R&D of linguistic projects with artificial intelligence in crisis times

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Abstract. *Machine learning (ML) is a core element of artificial intelligence (AI) and a key tool for linguistic research during crises. Classical ML ensures interpretability and efficiency for structured data, while neural network approaches are effective for large-scale and unstructured information. In unstable contexts, ML enables automation, adaptability, and rapid analysis of texts. Its applications include natural language processing, machine translation, and corpus-based forecasting of linguistic trends. Despite challenges such as data quality, bias, and resource limitations, hybrid integration of classical and neural methods provides both accuracy and resilience. Thus, ML strengthens the stability and continuity of linguistic R&D projects in times of crisis.*

Keywords: *computational linguistics, machine learning, artificial intelligence.*

Introduction.

Machine learning (ML) is the core of modern artificial intelligence (AI) technologies [1]. In general, ML can be divided into two main paradigms: classical (statistical, symbolic) machine learning [2], [3] and neural network machine learning (based on shallow [4], [5] and deep [6] neural network architectures). Classical [7] and neural network [8] machine learning are two fundamental paradigms, each with its own principles, methods, data and computational resource requirements, application areas, and strengths and weaknesses [9]. Classical ML is suitable for structured and small data with transparent algorithms, while neural network ML excels in analyzing & analytics of BIG, multitarget, high-dimensional and unstructured data [10]. Modern solutions in AI are often built on a combination of both paradigms to ensure efficiency, accuracy, and adaptability.

Modern linguistic research faces rapidly changing conditions of the external environment: economic instability, socio-political crises, technological transformations. In such conditions, traditional methods of text and language data analysis often become insufficiently flexible and require large human resources. *It is machine learning that provides opportunities for automation, adaptation and acceleration of processing of large volumes of data, while maintaining high accuracy of analysis.*

The main principles of modern machine/computational linguistics theory have been revealed in recent works by such scientists as: Ahmad, A., Abbasi, I. A., Abbasi, R. H., & Rasheed, B. [11]; Church, K., & Liberman, M. [12]; Gatla, T. R. [13]; Jalilbayli, O. B. [14]; Li, W. [15]; McShane, M., & Nirenburg, S. [16]; Stepanova, I. S., Nykyporets, S. S., & Hadaichuk, N. M. [17]; Tasheva, N. [18].

The Main Part.

The main directions/areas of using machine learning as a part of AI = the main tool of linguistic research in unstable and crisis situations are detailed and structured:

1) natural language processing (NLP) (morphological and syntactic analysis of text; semantic analysis and topic modeling to identify hidden patterns; analysis of tonality and emotions in texts to monitor public opinion);

2) machine translation and automatic translation (AI allows you to create translation systems that adapt to new terms and local language features; supports interlingual communication in the context of rapidly changing information);

3) analysis of large text corpora (identification of trends and patterns in large volumes of text; automatic creation of dictionaries, ontologies and knowledge bases; monitoring of language dynamics under the influence of social and economic changes; forecasting and scenario analysis; identification of new language trends and potential changes in communications; building forecasts based on time series and thematic models).

The advantages and positive consequences of using machine learning as part of AI - the main tool for linguistic research in conditions of instability and crises are identified: adaptability: models quickly learn new data; speed and scalability:

automation of the analysis of large amounts of text information; accuracy and prediction: detection of hidden patterns and trends; reduction of the human factor: minimization of errors and acceleration of data processing; predictive value: detection of new linguistic and social trends allows making informed decisions under conditions of uncertainty.

The challenges and limitations of machine learning as part of AI - the main tool for linguistic research in conditions of instability and crises are diagnosed: data quality: texts may be incomplete, heterogeneous or contain errors; model bias: algorithms may reproduce the bias of the source data; resource limitations: during crises, access to computing power and specialists may be limited; the need for constant monitoring and updating of models to maintain the relevance of the results.

Conclusions.

Machine learning is a key and classical tool for linguistic research in conditions of instability and crises. ML for linguistic research in conditions of instability and crises provides: acceleration of processing and analysis of text data; adaptation to dynamically changing linguistic and social conditions; increase the accuracy and efficiency of scientific projects; forecast new trends and identify hidden patterns in language and communications.

Modern linguistics also increasingly uses artificial intelligence to analyze large data sets, automate text processing, and extract hidden patterns. In conditions of instability and crises, traditional methods of ML analysis and analytics become less effective due to rapid changes in language, the emergence of new terms, and changes in communication practices. AI is becoming a key tool for research and development in linguistics in conditions of instability and crises, since AI allows you to adapt to new conditions, accelerate research, and ensure the continuity of R&D projects. The integration of artificial intelligence into linguistic projects ensures stability, flexibility, and high productivity of research even in crisis situations, making it an indispensable tool for modern scientific and applied language analysis.

Discussion.

The author puts forward a controversial thesis that it is the hybrid combination of classical machine learning methods and neural network approaches that forms the basis for building adaptive and resilient AI systems capable of functioning effectively even in conditions of instability and crises, which is confirmed in [19]. Such a strategy provides an optimal combination of interpretability, accuracy, and adaptability, which makes it especially relevant for modern research and applied projects. Thus, the combination of classical machine learning methods (regression, SVM, decision trees, clustering) and modern neural approaches (shallow neural networks, transformers, NLP models) allows building resilient and flexible systems that can effectively support scientific and applied projects in linguistics even in times of crisis.

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Implementation of immersive technologies in hospitality institutions: analysis of global experience

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Abstract. *Not only in everyday life but also in the service sector, the Smart Home system can create an optimal working environment and significantly improve employee productivity. The system helps reduce unproductive time losses while ensuring comfort and safety. The purpose of the article is to examine the prospects and advantages of implementing Smart Home technologies in hotel and restaurant enterprises, to identify methods and approaches for their application, to determine which technologies can be adopted, and to analyze the systems and tools required for integrating Smart Home elements into the service industry.*

Keywords: *smart home, hotel and restaurant industry, innovative technologies, automation, energy saving, security system, multimedia capabilities, environment management, information technologies.*