

Problems and Solutions of Artificial Intelligence Based on Big Data Technology

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Abstract: With the development of information technology, artificial intelligence technology is also experiencing breakthroughs and transformations. In this process, big data technology emerges as the times require. Data is too large to be collected, stored, managed, processed, maintained and collated in a reasonable time through traditional tools, and become more active information serving the society. The explicit symbolic representation directly available in AI is unable to represent the real world because it is difficult to update in real time and automatically, and cannot capture a large amount of tacit knowledge. Based on the analysis of modal theory, its research still stays at the level of symbols, but does not involve truth and reference, that is, it does not involve the connection between language and the world. This assumption essentially assumes that knowledge is made up of the relationship between the symbols and symbols of the object, and that intelligence is achieved through proper manipulation of the relationships between them. Its main task is to "general problem solver" through Abstraction. The approach of big data simulation intentionality is to realize the connection and organization of external things through language mediation, and to simulate the operation and application of human language symbols, in order to realize the artificial intelligence simulation target to the greatest extent possible.

1. Introduction

With the advent of the mobile era, the global Internet technology giants are actively laying out artificial intelligence strategy and planning cloud-based artificial intelligence service ecosystem [1]. Artificial intelligence research needs to achieve a breakthrough at the level of philosophical thinking. This breakthrough is a methodological sense, which can provide an effective guidance for the technical practice of artificial intelligence [2]. With the development of Internet technology, the research of AI in single agent has turned to distributed research. It can not only solve single-objective distributed problem, but also solve multi-objective problem of multi-intelligent subject. Big data technology is a technology that can quickly obtain valuable information from various types of massive data [3]. Big data can collect more data information in the virtual world, and then use big data thinking to analyze these data reasonably and effectively, and retain all collected receipts to quickly restore the real world [4]. The world is modeled inside the machine with symbolic expressions to form dominant propositional representations; these characterizations are then manipulated according to specific logic rules. Meaning and cognitive functions can be performed under appropriate conditions, such as the combined calculation of inductive inputs and internal memory structures, which can also be simulated under hypothetical conditions. Nowadays, artificial intelligence has been applied in the field of computers, so that it has self-protection ability, and can learn to repair itself under the guidance of certain programs [5].

There are stochastic factors in the evolution of complex systems and human intelligence. The uncertainty of quantum mechanics gives us many important inspirations. The uncertainty is embodied in the complex network, the variation and evolution of human thinking [6]. It can reduce errors in the process of repeated learning to achieve the function of memory, and it can also play a certain auxiliary role in human life. Big data technology and the big data thinking behind it provide a new way for the research of philosophy and methodology of artificial intelligence, and also a practical approach in technology [7]. It is now becoming the core driving force for a new round of industrial transformation, and will further release the enormous energy of previous scientific and technological revolutions and industrial transformation savings, and create a new powerful engine

[8]. Installing various types of sensors in artificial intelligence equipment can not only collect a large amount of data, but also upgrade the communication network technology and transmit a large amount of data to the cloud server [9]. Intelligently correlate the collected environmental data, configuration data, behavior data, protocol analysis data, etc., discover and warn potential information security incidents, and even evaluate the organizational background, scope of influence, and destructive capabilities behind the incident. As people pay more attention to data and increase their awareness of collecting data, big data is constantly changing people's work, life and way of thinking [10].

2. Materials and Methods

Artificial intelligence will improve the level of active service. It can not only expand post-market services such as online monitoring, intelligent identification, remote operation and maintenance, intelligent diagnosis, but also realize full-cycle services. The mode of single connection completing all tasks has gradually begun to appear bottlenecks, so many protocols use dynamic negotiation ports for data transmission. Intelligent training requires a lot of guidance and a lot of knowledge accumulation and repetitive training. On the basis of the research, knowledge representation is the key link of cognitive science and artificial intelligence. What kind of behavioral pattern is there? Here, big data abduction thinking is an external way of reasoning. In the application process of artificial intelligence, it is not simply understood as the reverse of phenomenon to essence, but firstly based on massive related data. A certain intelligent goal or task presupposes a theory. That is, quickly check each thing and find out most of the non-related items. This strategy requires the establishment of a priori category that describes what type of event can affect what type of fact.

In the process of artificial intelligence simulation, each cognitive subject is the internal unity of perceptual thinking and rational thinking. Intelligent storage space should be expanded, large data thinking should be infiltrated into AI, and the analysis and discrimination function of AI for a large number of data should be strengthened. Large data technology should be used to calculate all kinds of data scientifically and effectively. For those large-scale tasks, in order to shorten the time and improve efficiency, tasks are usually assigned to different sub-nodes according to certain rules or algorithms. The sub-nodes complete the sub-tasks, and then aggregate each sub-result. It is used to map a set of "key-value pairs" into a new set of "key-value pairs" and specify functions to ensure that each function sharing the same "key-value pairs" in all mappings can perform coordinated parallel computation. The concern is what kind of framework axioms are needed to cope with the changing world. The framework problem in this sense can be called a general framework problem. And use artificial intelligence inference engine to process unstructured data and turn it into structured data. For the interaction of the world, the understanding of the process of thought generation and its own control, or at least part of the control process, the most important feature of consciousness is its intentionality, self-referentiality, non-locality and emergence.

In terms of data types, traditional data is mainly structured data, while Internet data is mainly semi-structured and unstructured data. Its theory is based on motivation theory, morphological formation theory, non-linear science theory and genetic theory. After perceiving stimulus, cognitive subjects generate appropriate behavior responses through self-adaptive, self-learning and self-organizing ways. Connectivism representation is called spatial engine. It differs from the syntactic engine of symbolism representation in that its representation relationship is not litigation. The similarity of syntactic structures depends on the similarity of spatial structures. In comparison, when storage and computing resources are insufficient, the storage and computing resources can be dynamically allocated or increased, which ensures that the number of cluster nodes is increased intelligently when the storage and computing resources are insufficient, and the storage space and computing power of the platform are rapidly improved. Applying big data thinking to artificial intelligence has also developed into this stage. It has cognitive computing capabilities and pays more attention to the understanding and analysis of big data.

Mining is the core technology of big data technology analysis. Only by finding more reasonable mining algorithm, can we mine the real value of big data accurately and effectively, and can we

realize the analysis of dynamic development data better. The application of big data thinking in intelligent manufacturing will contribute to the management, collection, analysis and processing of data in manufacturing field. At the same time, it is also a powerful platform for intelligent manufacturing, using cloud to expand the storage interface of data. In order to improve the retrieval performance and ensure the reliability of the data, the index is stored in the distributed file system in the form of multiple fragments and multiple copies. Through distributed computing and search technology, the near real-time query of the recently inputted data can be achieved. Intelligent configuration is used to support the model in the free choice model base and to configure the appropriate analysis engine, which is then combined into a new model to implement a regulatory analysis business. The model supports expansion and continuous optimization through machine learning and simulated data drilling to establish a conformity relationship with the object. Whether through the involvement of the sensor or through the training of the classifier, the characterization of the final established class must be dominant. Non-physical attributes are decentralized between people and the world. This attribute is completely different from the theoretical theory of artificial intelligence in the past. The traditional view regards intentionality as a unique attribute of the human brain and requires a physical carrier to be concretely presented.

3. Result Analysis and Discussion

Before work, AI can make decision-making activities similar to intelligence, think about decision-making, and analyze a large number of data by using information infector, so as to make AI serve users better. Large data analysis technology provides theoretical support on the intentional attribute of AI. This presupposition defines intentionality as both internal and external. It is an intentional attribute between them, as shown in Figure 1. Each sub-task is executed in parallel at different sub-nodes, which makes full use of the resources of sub-nodes and reduces the load of a single node. When processing data, the data is not written to disk and cached in the memory of each node. The core capability platform has the characteristics of low latency and strong real-time performance. By setting the event processing topology in advance, the event processing flow can be quickly established. And assume that everything remains the same. The so-called common sense inertia law. That is, we assume that an action does not change a given attribute of a situation unless there is evidence that an attribute has actually changed.

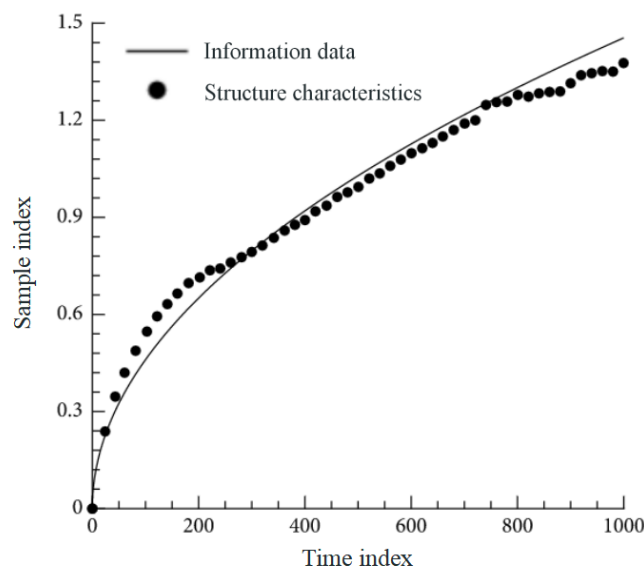


Figure 1 The Attribute of Intentionality

For heterogeneous data storage and fusion, hybrid storage should be adopted. Structured data storage and processing rely on traditional relational databases, while a large number of unstructured data need to rely on non-relational databases. The knowledge and understanding of AI has gone

through the stages of expert reasoning, direct reasoning and calculation. Under the thinking of big data, the data will grow continuously and change qualitatively. Standard protocols specify unique message, command and state migration mechanisms. By analyzing the proprietary fields and states of application layer in traffic data packets, these traffic can be identified accurately and reliably. Artificial intelligence can not completely replace a job. The human-computer interaction technology widely used in artificial intelligence is the cooperative production of workers and machines, but other parts that need human judgement can not be replaced. However, the potential for a change affecting the attributes of other objects is infinite, and those a priori categories are difficult to cover all of them, but increasing the a priori category will make cheap testing less expensive. In addition, in the process of artificial intelligence using the flexible reverse of big data, it also shows obvious probabilistic, uncertain and fault-tolerant features, because artificial intelligence will constantly assume and Construct relevant theoretical presuppositions. The ability of behavior to interact with the environment to interpret behavioral choices with self-replication and reproductive capacity of information. However, not all behavioral choices are directed at evolution.

For the problems solved by artificial intelligence experts and linguists, scholars and experts studying artificial intelligence should also conduct in-depth linguistic research and combine linguistics and intelligence to realize the diversity of research approaches for artificial intelligence. Artificial intelligence and other disciplines can learn from each other, and they can be "two-way streets" with frequent exchanges. If there is a higher level structure, which characterizes the relationship between actions, then a procedure for understanding news stories and generalizing them can be constructed. The abnormal behavior discovery module discovers the behaviors of worms, port scans, trojans and the like that may exist in the traffic. All information is standardized through the message transmission module and then sent to the big data platform for storage. If there is a representation of reasoning. The interpretation mode of the chain, then understanding can be creative, or form a new understanding. The big data evolution simulation paradigm is a paradigm Abstracted on the basis of data analysis technology. They provide an innovative approach for the future development of artificial intelligence. The framework problem is not a toy world. The complex associations between the various objects in the real world often invalidate the law of inertia of common sense, and then have to re-characterize these associations, thus once again falling into the trap of the framework problem. Scientific and effective calculation of various types of data, enhance the ability of robot object recognition, enable robots to meet people's needs, and then realize the penetration of big data thinking in artificial intelligence.

4. Conclusion

In this paper, the artificial intelligence problems and Countermeasures of large data technology are studied. According to the characteristics of AI and the multivariate characteristics of AI, fresh elements need to be injected and other research methods need to be applied reasonably. The conceptual structure of theory can be easily imitated by computational programs, but no model can concentrate on the mind. This process often leads to new ideas about one's own theory or how to be tested. The layering of big data, evolutionary simulation paradigm and traditional symbolism, connectionism and behaviorism paradigm complement each other, which makes the methodological significance of big data thinking more prominent in the study of artificial intelligence. According to the reward signal of the environment feedback, the behavior function is adjusted, and the action plan is improved to adapt to the environment. As the node in the event processing flow, after all the event processing is completed, the rule engine entry is integrated into the calculation analysis engine, and the rule engine combines the log data. Data visualization is the ultimate goal of data analysis. Visualization can visually show the intrinsic links between data and possible potential trends, so that the criteria for interactivity can be initially met. And as a neural network without training samples, the establishment of the representation relationship completely eliminates the external endowment of the designer. Improve the ability of artificial intelligence recognition, so that artificial intelligence can meet people's needs, and then realize the penetration value of big data thinking in artificial intelligence robots.

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