Research on Artificial Intelligence Software Development Architecture Based on Data Mining Technology

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Abstract: In many fields of computer science, artificial intelligence software is the most challenging and creative field. With the birth and development of artificial intelligence, people begin to use computers in the field. The core step is structured processing of unstructured data, which can reduce the volume of data and the difficulty of data mining, analysis and application. Based on the in-depth analysis of the nature of software development automation, based on the ubiquitous model of software systems, the concept of template engineering is introduced, and the automation development process is supported and implemented through the mapping transformation of template engineering and layer language. Generates all rules that contain only the items of the collection, where each rule has only one item to the right, and the definition of the middle rule is used here. Transforming the feature representation of the sample into a new feature space makes classification or prediction easier, and it has become a hot spot to promote this wave of artificial intelligence.

1. Introduction

Under the background of the significant improvement of energy efficiency in data mining and the rapid penetration of artificial intelligence, this paper takes computer hardware and software, computer science, artificial intelligence and expert system technology as tools, and logics as methods and guidance [1]. Knowledge is expressed as a "knowledge base" that can be directly processed by computer, and "computer intelligence" is used to simulate human experts or "human intelligence" [2]. Data mining, also known as knowledge discovery in databases, is a computer-aided process for finding and analyzing large data sets, which in this process can be a pattern that has never been discovered before [3]. From the aspect of algorithm, the current artificial intelligence data mining technology solutions include deep learning algorithm, algorithm optimization and algorithm integration. Data mining technology optimization These two parts are highly coupled during execution. The intelligent software engineering environment in the development field is feasible. This will certainly promote the development of artificial intelligence and software engineering. Similarly, the solution of artificial intelligence problems also requires the use of software engineering technology, so that it has a good structure, high reliability, scalability and careful intelligent mechanism [4] .

Intelligence is needed in general software engineering field, so it seems natural to use artificial intelligence technology to build some systems to execute or assist software engineering. Software engineering is a knowledge-intensive activity [5]. Artificial intelligence requires not only hardware but also software. As the world's leading supplier of intelligent operating system and platform technology, China Kochunda has natural advantages in the field of artificial intelligence systems and is expected to open the window of artificial intelligence [6]. Artificial intelligence technology, to create the guiding ideology of wisdom, in-depth research and exploration of big data technology framework, big data service cloud platform, machine learning, natural language processing, image recognition and other data and new technologies in the field of artificial intelligence [7]. Data obtained from structured processing of unstructured data will eventually be stored in relational databases [8]. The ability to allow the system to collect and process information from users at different times is called the adaptive capability of the system. As long as the frequency of the user logging in to the system is higher, the longer the login time, the more accurately the system can

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analyze the user's current information. The closer it is to the real situation of the model and the user [9]. In order to avoid data redundancy, in order to avoid repeated two or more structured processing of a file. Another feature is its powerful numerical calculation ability, which can handle large numbers and can easily unify symbol calculation and numerical calculation [10].In order to fully realize the effective use of information resources, promote the artificial intelligence of big data mining and the concentration of investment benefits. Many forward-looking big data information application mining technologies based on artificial intelligence technology have been proposed. The technical architecture of artificial intelligence is combed out, which enables the industry to have an overall understanding of artificial intelligence and further promote the application of artificial intelligence and industrial development [11].

2. Materials and Methods

It further enhances the development of storage engine, computing engine and infrastructure of AI software [12]. By introducing new components to enhance the technical support capability of the large data platform, we can solve the problem of high degree of specialization of the original single product in the way of product portfolio. Intelligent interfaces are much more flexible, adapting to both the semantics of the displayed data and user preferences. Intelligent interface should adopt natural language generation technology, which should respect the user's knowledge model.In the actual project, to master the structure and principle of the mainstream microprocessor must master an operating system must be familiar with the software development process and at least a software project [13]. It produces only all the general rules in the collection project, and the right part of each general rule usually has only one item. In this place, we use the definition used in the general rule. The artificial intelligence software development activities required, such as the knowledge of programming technology, the knowledge of the application field, the knowledge of the software engineering methodology and the knowledge of the related problems of the target software itself, the parameters used in the artificial intelligence software development activities are shown in Table 1.

Table 1 Using Parameters in Software Development Activities of Artificial Intelligence

	Realization	Integrate
Testing and validation	6.05	7.19
Requirement analysis	5.13	5.05

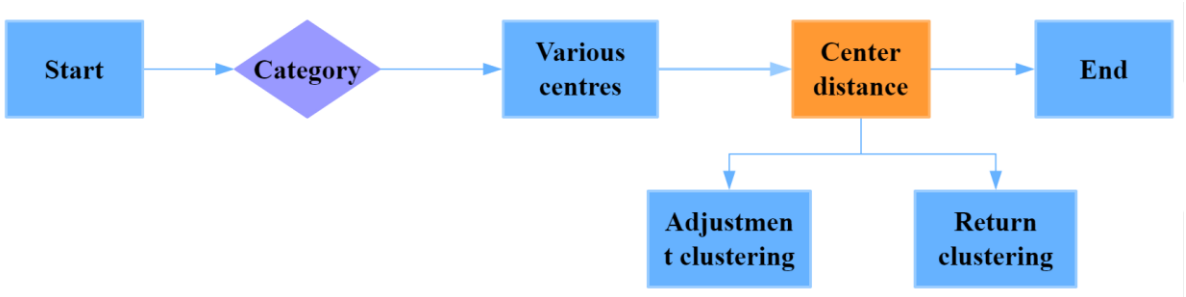

Fig.1. Data Mining Analysis Flow Chart

AI database has special function modules, including the function of knowledge acquisition; integrated database is a database used to store unstructured data after structured processing. From a certain point of view, the essence of software development is to realize the mapping from high-level concepts to low-level concepts, and from high-level processing logic to low-level processing logic. According to data mining, their specific goals, needs and preferences are extracted, and the content is dynamically adjusted by teaching to implement personalized services. The data mining analysis flow chart is shown in Figure 1. For an intelligent hierarchy that belongs to "knowledge processing" or "knowledge." Its main content is the formal representation of knowledge, automated reasoning, intelligence or creation. Intelligent software development systems are an important part of this. If it

is calculated in the cloud, the device collects the data and uploads it. After the calculation is completed, it returns to the terminal. This will inevitably bring about a certain delay. In the driving scenario, this delay means an increase in the risk factor. Artificial intelligence data security, but an intelligent level of "knowledge processing" or "knowledge." Its main content is the formal representation of knowledge, automated reasoning, intelligence or creation.

In order to reduce the technical difficulty of intelligent monitoring of unstructured files, as well as to reduce the volume of data. Specifically, it assembles applications through software architecture, patterns, models, frameworks and tools. Software architecture defines the methods used to generate members of a software product family. Software templates include code and metadata that can be loaded into extensible tools. It also operates with high performance and enhances users' interest by designing beautiful and powerful pages, which are easy to operate. In the real-time computing engine, a real-time computing engine is established in the big data technology framework system through self-research, which solves a series of underlying technical problems and abstracts each business model into “input, processing, and output”. The data flow processing flow. The upper-layer business system only needs to pay attention to the implementation of business logic when it is used. Through the continuous operation, evaluation and improvement of the prototype, a good design scheme is finally obtained. Rapid prototyping is considered as one of the solutions to the substantial difficulties of software development.

3. Result Analysis and Discussion

The two cores of AI software are "artificial" and "intelligence". Intelligence includes information and knowledge processing, symbol processing, problem solving, etc. Intelligence can also be described as a combination of the ability to process and demonstrate information widely. The final review of design and coding, so software testing throughout the entire software development process. Testing is the process of executing a program to find errors in the program. It is an important means of software quality assurance. Encoding for a specific computing platform is automatically performed by the execution engine. Thus, the business logic and implementation technology are successfully decoupled, and the value of the model is maximized under the conditions of the prior art. It does not need to care about the implementation of artificial intelligence technology and the underlying algorithm. It only needs to care about business scenario analysis and build service applications based on services, and promote the application of machine learning platform in various vertical fields to help build.

At the pace of AI related frontier technology, the prototype validation and pilot application of AI technologies such as machine learning, natural language processing, image recognition in our bank's anti-fraud field, intelligent customer service and other fields have achieved certain business results. Simple key words are not enough. If artificial intelligence technology is used in semantic pattern matching, it is possible to build a more successful library management program. In development, assembly is seldom written, but the minimum requirement is to be able to understand the assembly. When transplanting a system, you need to start from the bottom, then the kernel transplant, file system transplant, etc. The porting of this part of the hardware is very large, and its configuration steps are relatively complicated. User identification is the process of associating each user and other requested pages, and accessing the site through proxy services and firewalls for more individual users to obtain their situation. We don't just rely on IP but we can't separate them. We need to use specific data mining techniques to handle them during the user identification phase.

In the research of data processing platform technology, running new technology improves the timeliness of application transaction monitoring, from original minute level monitoring to second level monitoring. Platform development mode based on stream data processing platform. Template is a tool and method used to construct framework, component and program logic. The relationship between layer language and template is just like that between pre-mixed concrete and template in construction engineering. When the high-level workpiece described by layer language is handed over to template engine. The nature of analysis, reasoning, and target software requires formal reasoning systems. Of course, such systems must be combined with knowledge representation

systems. Optimized for the data, the data list obtains the lookup interface method that is not used, and the session directly uses the access database to obtain the data list, and then transmits one page of data to the client at one time. All entities use the local interface mode, so that the session creates the entity EJB without going through the network and directly on the local.

4. Conclusion

In this paper, the development framework of AI software based on data mining technology is studied. Natural language processing technology is used to process unstructured data structurally. Then the audit rules are managed with knowledge base. When the load of the receiver increases, the communication server can read and write files smoothly, which shortens the response time of receiving data. The advantage of thread pools is that by reusing threads for multiple tasks, the creation overhead is shared among multiple tasks. Create a set of association rules using the generated set of entries. Further improve compatibility, timeliness, and convenience, and achieve cost control; improve service cloud high availability through resource isolation deployment. The interaction between artificial intelligence and software engineering will eventually lead to the formation of a new generation of software development and implementation specifications, the use of intelligent technology will likely overcome the increasingly complex phenomenon of software production.

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