

Research on Implementation Strategy of Electrical Automation Control Based on Artificial Intelligence Technology

Hongli Zhou^{1,*}, Yongqiang Zhao²

¹School of Electronic Information Engineering Ningxia Institute of Science and Technology, Ningxia, China

²Operation and Maintenance Department No.2 Branch of Zhongse (Ningxia) Oriental Group Co., Ltd, Ningxia, China

*corresponding author

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Abstract: This article mainly focuses on the realization of electrical automation control based on artificial intelligence technology, because of the continuous improvement of electrical automation technology in our country, and the competition pressure of various industries is very great. The reform and innovation of artificial intelligence technology also brings opportunities for the development of our country, but also brings certain challenges. This article will analyze the many problems faced in the field of electrical automation under the background of "artificial intelligence technology ", and give reasonable solutions according to these problems, so as to lay a certain foundation for the future electrical development of our country and solve the problems fundamentally.

1. Introduction

Because of the rapid development of artificial intelligence technology in China, it has been applied in all aspects, especially in the construction of electrical automation. Because our country belongs to the heyday of science and technology construction at present, if does not have the reasonable plan the electrical aspect development to appear the question, then will hinder our country development advance step. Therefore, how to use artificial intelligence technology rules to plan the development of electrical automation, how to ensure the sustainable, healthy and stable development of urban electrification and economy, is worth studying.



Figure 1 Data interchange

2. Use of Artificial Intelligence Technology to Plan the Specific Problems in the Process of Urban Electrical Development

2.1. Processing of Artificial Intelligence Technology in Electrical Automation Planning is not Yet Mature

Because of the complexity of the electrical system in China, it is difficult for the relevant departments of electrical automation planning and related personnel to plan and explore from different angles because of the large data types and large numbers of each link, and mostly located in different fields [1]. Therefore, the application of different artificial intelligence technology processing methods can play its effect, but many artificial intelligence technology processing methods are not mature, resulting in more difficult data processing, some knowledge theory has not yet formed a complete theoretical system, to electrical automation planning work has brought great challenges.

2.2. Low Safety of Artificial Intelligence Technology in Electrical Automation Planning

Artificial intelligence technology processing technology in electrical automation planning research for large-value drivers must be studied and analyzed social groups, which involves the internal confidentiality of the electrical industry, there is a high security risk for data security. in the era of artificial intelligence technology, there is a large number of data abuse in electrical automation planning, resulting in the safety of artificial intelligence technology greatly reduced.

3. Considerations of Electric Automation Planning and Construction in the Age of Artificial Intelligence Technology

3.1. Application of Artificial Intelligence Technology in Electrical Automation Equipment

Because of the high complexity of electrical automation system, it often involves a lot of professional knowledge, they need good personal quality RAPO For the operators of electrical automation equipment, it is necessary to have a deep understanding of the relevant professional knowledge. Because of the complex electrical organization of the automation system, the actual operation efficiency is higher, so it can minimize the incorrect operation, resulting in abnormal shutdown and even dryer accident. This can usually be achieved by applying artificial intelligence technology to related problems, which is the core of the technology relative to intelligence technology [2]. The core of artificial intelligence is computer theory. In the practical application of compiling related programs, intelligent control of electrical automation is realized under the control of computer. In a sense, the intelligence of electrical equipment is mainly to replace the actual operation of human with intelligent equipment. Therefore, in addition to improving the actual production efficiency, it can also reduce the cost to a certain extent. The application of artificial intelligence in computer automation electrical engineering can improve the scientific nature of electrical automation equipment in actual operation and optimize the operating environment of equipment.

3.2. Application in Daily Operation of Electrical Equipment

The power industry has a certain connection with people's life and production, because of the complexity of power equipment, there is also a big gap in the daily performance control. In the traditional daily operation, its operation mode is also more complex, and it will effectively increase the control time of the power system and reduce the occurrence of faults. effectiveness of the control. Therefore, it is necessary to strengthen the effective application of artificial intelligence in practice, and in daily operation, artificial intelligence has a wide application prospect. efficient devices that can be used to perform certain basic control algorithms to simplify these complex operating procedures and implement them. Effective control is also very important, the most important thing is to deepen artificial intelligence technology, but also to achieve remote control, can simplify the user interface, timely processing and recording of important data related to future research and application, in order to facilitate the daily operation of users.[3]. For the large amount of data to be recorded, such as electrical equipment, power loss, if manual recording, there will be a huge amount of work, but also know but the application of artificial intelligence technology to compile the corresponding tables and data acquisition system, while improving the efficiency.



Figure 2 Major technical software

3.3. Value of Artificial Intelligence Technology Processing Technology in Dialectical Ideas

Blind artificial intelligence technology fans believe that relying on AI algorithms and new computer science can become a powerful force in large-scale data analysis, and its ability is beyond the ability of human and traditional science to fully explore its potential value. In many practical applications, artificial intelligence technology analysis, which relies on artificial intelligence, has had a certain impact. However, "information favors trends and ignores masterpieces". Even in the era of artificial intelligence technology, the decision of major events about urban electrical development is still similar. For a considerable period of time, the application of artificial intelligence technology can not simulate these complex human social decision-making processes and can not fully predict the future of urban electrical development. Blind data worship may have devastating consequences for urban electrical development.[4]. Electrical automation planners need to build a new electrical automation planning support system that not only reflects the characteristics of human decision-making behavior, but also reflects the rules of electrical automation planning. because of expert-driven artificial intelligence technology analysis, blind artificial intelligence technology fans believe that artificial intelligence technology analysis samples are better, AI algorithms are very effective in analyzing non-human biases and computing systems. moreover, artificial intelligence technology analysis can find more relevant than traditional analytical methods. no causal link is needed to explain the cause of this phenomenon. and more accurate results can be produced without rigorous analysis. However, relying on correlation analysis without professional knowledge to explain, when the situation changes, it is difficult to adjust the prediction model accordingly, it is easy to make mistakes.

4. Positive Impact of Integration of Artificial Intelligence Technology into Electrical Automation Planning

Nowadays, our country has entered a large-scale application stage of artificial intelligence technology. Facts have proved that most of the urban electrical planning in our country has implemented network information management. According to the use effect, artificial intelligence technology management is indeed much more efficient than artificial management. The development speed of electrical automation planning is greatly strengthened, and the influence of artificial intelligence technology on the traditional electrical automation planning mode is very great. The combination of the two lays the foundation for the information market of urban electrical network [5]. The relevant departments can integrate artificial intelligence technology with electrical automation planning, form urban electrical artificial intelligence technology processing, and then develop relevant urban electrical network software, implement timely and effective urban electrical network management, so as to promote the development of urban electrical implementation network artificial intelligence technology processing mode. Data acquisition and processing can be done by artificial intelligence technology, because of this function, so that the various data of electrical equipment can be collected, and timely processing and preservation of relevant data, so that the actual control efficiency of electrical automation can be greatly improved. Artificial

intelligence technology can complete the monitoring of the system and carry out the necessary alarm. Artificial intelligence technology can monitor the analog data value of the main equipment in the electrical system in real time. The operation control function of artificial intelligence control is better. The automatic control of electrical equipment can be carried out by using mouse and keyboard, and the parallel grid-connected load operation can be completed by using the control program, which can not only greatly reduce the working intensity of the operator, but also greatly improve the control efficiency, which is in line with the actual needs of the current industrial development.



Figure 3. Technology applications

5. Conclusion

Artificial intelligence technology belongs to the category of computer technology, and its main purpose is to grasp the intrinsic essence of human intelligence, at the same time, to simulate the intrinsic essence of human intelligence and to transform human intelligence into machines. Artificial intelligence technology takes robot and expert system as the main research object. It involves many subjects, such as psychology, logic and linguistics, but computer science has always been its main content. In general, effective research on artificial intelligence technology has a certain complexity, so it is necessary to use intelligent machines to solve these complex tasks. In essence, the human brain is spiritualism, and intelligent machines can be realized on the basis of brain simulation. and feedback on this basis. Therefore, the main way to strengthen the realization of automobile goals in today's industry, it is important to simulate the human brain. With the development of network technology, the sharing of artificial intelligence technology in urban planning has spread all over the world, but there are still many problems that are difficult to obtain artificial intelligence technology information in electrical industry. Due to technical, system and cost factors, only large electrical enterprises have the right to collect, store and process large data resources. Therefore, the government and large electrical enterprises can enjoy the vast majority of artificial intelligence technology processing technology, but it is difficult to make all electrical industries across the country to enjoy artificial intelligence technology, which is undoubtedly a major challenge in the design of scientific planning.

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