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Application of Intelligent Recognition Technology in Image Processing

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***Abstract*:** With the development of science and technology, intelligent recognition technology is more and more widely used in many industries, as well as in image processing. Making full use of related technologies can effectively improve the efficiency of image processing. However, due to the limitations of technology, there is still a lot of room for improvement in the application of related technologies. On the one hand, it can improve and optimize the intelligent recognition technology itself, on the other hand, it can improve the efficiency of image processing. In this paper, combined with the reality of image processing in China, the intelligent recognition technology is studied as the breakthrough point.

***Keywords*:** Intelligent Recognition Technology; Image Processing; Application

The development of computer technology provides a solid material foundation for image processing, image processing plays an important role in people's daily life, and the application of related technologies can provide great convenience. Electronic image processing has gradually become a discipline, the specific content is constantly enriched, and the application forms also show a diversified development trend. The traditional image processing technology has gradually been difficult to meet the actual needs of the current, the use of intelligent recognition technology has become a trend. If we want to give full play to the advantages of intelligent recognition technology, combination of the actual needs of image processing is needed.

1. Advantages of intelligent recognition technology

The advantage of intelligent recognition technology lies in intelligence. It can process a large amount of information and data and extract relevant information by using related technology. For image processing work, not only the accuracy has been greatly improved, but also the processing capacity has a qualitative leap. Combined with the practical application of this technology, it has the following advantages:

1.1 Strong relevance

Using the intelligent recognition technology, we can find that the relevance between different images has been greatly improved, which not only creates convenience for the immediate information processing, but also creates convenience for the later information data processing and classification.

1.2 It can be revised by people

People are generally the main body of image processing work, because most of the processing work needs to be promoted by people, so it is very helpful for image processing to give full play to the positive role of people. In the traditional image processing work, human operability is relatively poor, by the use of intelligent recognition technology, human revision ability has been greatly improved, and it is also of great help to ensure the quality of image processing work.

1.3 A lot of information

At present, the processing capacity of information data has been greatly improved, which is a huge challenge for related

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industries. In the application process of intelligent recognition technology, a large number of information and data can be processed, which not only greatly improves the information coverage, but also greatly improves the efficiency of information and data processing.

2. Application characteristics of intelligent recognition technology in image processing

Taking full advantage of intelligent recognition technology can create great convenience for image processing.

2.1 High flexibility

In the traditional image processing work, the flexibility of related technology is relatively low, which is not conducive to the staff to play their own initiative. After the use of intelligent recognition technology, this situation has been greatly changed. In the process of image recognition, the related system can fully consider a variety of factors and realize scientific adjustment. Combined with the actual processing work, for example, if the microscope image needs to be processed, the relevant technology can combine with the specific source of the image, select a reasonable processing method, so as to effectively ensure the efficiency of information processing, and the automation level of processing is relatively high. Considering many factors, high flexibility is the main application feature of this technology.

2.2 Guarantee image pixels

In the traditional image processing work, if there is a processing failure, information may be lost. In the intelligent recognition technology, this situation has been greatly improved. Therefore, in the process of recognition and information processing, the system will promote the relevant information backup work, if there is a failure, it can take effective measures in time, at the same time protect the image's own pixels, and restore the image when necessary, which is also an effective guarantee in the image processing process.

2.3 Reproduction function

Due to the limitations of technology, only a single image can be processed in the process of image processing. With the blessing of intelligent recognition technology, this situation has been effectively improved. The use of related technologies can realize the conversion of two-dimensional array and one-dimensional array, and the conversion efficiency is also relatively high, which is the reproduction function.

3. Application of intelligent recognition technology in image processing

Intelligent recognition technology is still in the primary stage of development, many industries do not have a comprehensive understanding of intelligent recognition technology, but with the development of computer technology, the technology is constantly improving and optimizing. The current social development provides a broad platform for the application of this technology, such as illustrator, which is an important tool in related fields. On the one hand, it increases the interest of image processing work, on the other hand, it is also conducive to fully mobilize the enthusiasm and creativity of the majority of workers. The advantage of intelligent recognition technology is an important reason to ensure its sustainable development. Combined with the actual development of the technology, there are mainly the following applications:

3.1 Image preprocessing

Image preprocessing, as the name suggests, is to separate and check different text images first, and then hand over the relevant images to the recognition module for recognition. The application of intelligent recognition technology can achieve image preprocessing, on the one hand, it can ensure the detestability of information, on the other hand, it can also process the related images efficiently. Combined with the specific measurement work, for some of the collected images, we often need to edit, for some of the information and data, we need to preprocess the image.

3.2 Image processing

There are many kinds of images, and the processing needs are also more diverse. Therefore, in the image processing work, we generally need to use a variety of processing technologies, and even sometimes need to integrate a variety of processing technologies, which puts forward higher requirements for the industry staff, mainly in the following directions: firstly, the application in the field of advertising, such as commercial advertising and public welfare. For example, if you want to realize the related design work of pictures, it is mainly realized through Photoshop software. Secondly, it is the image processing work for some specific needs. The design staff should not only make clear the design requirements, but also master a variety of basic software functions, which can guarantee the efficiency and adaptability of the design work to a great extent.

4. Application strategy of intelligent recognition technology in image processing

In view of the wide application of related technologies in image processing, it is necessary to formulate a perfect application development strategy.

4.1 Changing the concept of application

The correct application concept can lay a solid foundation for the later application of technology. Combined with the practical application of related technologies, the application concept is relatively old and difficult to meet the development needs of the current industry. It is necessary to comply with the development trend of the industry and change the application concept in time. For the change of application concept, on the one hand, it should be combined with the actual development needs of the industry, on the other hand, it should also be combined with the future development prospects of the industry, so as to ensure the adaptability of application concept to the greatest extent.

4.2 Training professional talents

Talents can play an important role in the development of an industry. Intelligent recognition technology is the integration of computer technology and other new technologies. There are higher requirements for the quality of the staff. In the image processing work, we should not only have higher professional quality, but also have excellent professional skills, such as computer skills. In the process of training professional talents, we can use professional seminars and exchanges and other forms of talent training to improve professional quality and exercise comprehensive skills main objectives. Professionals are the main body of application work, so we should promote the exchange and training of talents.

5. Conclusion

Intelligent recognition technology is widely used in image processing. With the development and progress of related technology, the application is also becoming diversified and in-depth development. In order to ensure the efficient application of related technologies and lay a solid foundation for the development of the industry, the following work needs to be promoted: from the industry itself, we should have the courage to innovate, summarize the past application experience, and take talent training as the primary task in the development process of the industry; from the staff, we should timely change the application concept, combined with the actual situation of the industry development needs and the development trend of the times, constantly improve their professional quality, and exercise their comprehensive skills, so as to inject continuous power into the development of the industry.

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