

# Research on the Application of Artificial Intelligence in Intelligent Community

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**Abstract:** With the progress of society and the rapid development of the times, artificial intelligence technology is gradually applied in all walks of life, which greatly improves the work efficiency and facilitates people's work and life. This paper first discusses the application premise of artificial intelligence in the construction of intelligent community, then analyses the application mode of artificial intelligence in the intelligent community, and finally gives the application strategy of artificial intelligence in the process of intelligent community construction.

## 1. Introduction

With the rapid development of information technology and Internet technology, artificial intelligence has become a research hotspot in science and technology industry. With the popularization and application of various intelligent devices, intelligent community has become a new concept of community management and the latest mode of social management. Based on Internet of things, big data, mobile Internet and other information technologies, smart community provides comfortable and convenient intelligent living environment for community heads. In a word, the intelligent community is built with artificial intelligence as the core.

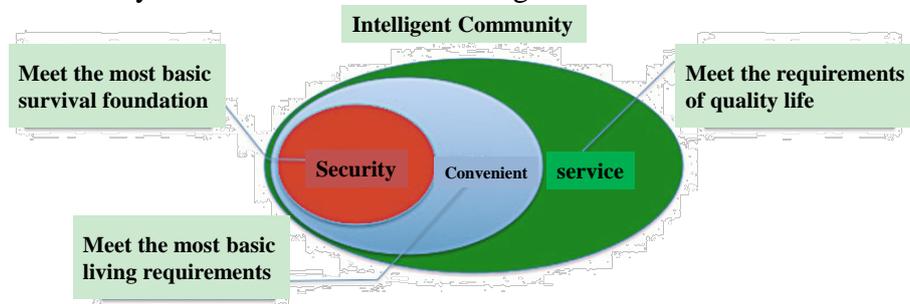


Figure1. Goal of the application of artificial intelligence in the intelligent community

As shown in Figure 1, solving the practical problems of community security, convenience and service is the key goal of the application of artificial intelligence in the intelligent community at present. Therefore, it is of great practical significance to study the application of artificial intelligence in the intelligent community.

## 2. The Application Premise of Artificial Intelligence in the Construction of Intelligent Community

Artificial intelligence will be the future trend of changing people's life and production mode, and will transform our life in all aspects. The application of artificial intelligence in the process of community construction needs to be based on advanced computer technology, communication technology and control technology, and the master of technology is innovative talents. In addition, the application of artificial intelligence in the construction of intelligent community needs a perfect broadband infrastructure and a good transformation of the role of community management subject.

## **2.1 Innovative talents are the core elements in the construction of intelligent community**

As a new technology, artificial intelligence is still in the primary stage of development, but also faces more technical challenges. In order to solve the problems faced by artificial intelligence and adjust it, we need a lot of scientific and technological talents. As the main driving force of leading development, the key to innovation lies in innovative talents. Using new information technology to establish or improve the community comprehensive service website, improve the community residents' sense of autonomy and innovation. The traditional way of learning, such as TV, newspaper and other media, cannot meet the needs of community residents to acquire knowledge. It can establish a public wireless local area network and improve the learning ways of community residents.

## **2.2 Broadband network infrastructure construction is the key factor of intelligent community construction**

The construction of intelligent community needs the guarantee of perfect network infrastructure. Broadband network is an important carrier of various information applications, artificial intelligence is the core technology of intelligent community, and broadband network infrastructure is the core of intelligent community. Without broadband network infrastructure, intelligent communities will set up information islands. Therefore, it is necessary to improve the construction of broadband network infrastructure and build a perfect Internet of things system. It can be said that only by establishing a sound broadband infrastructure; the intelligent community can guarantee the effectiveness of artificial intelligence.

## **3. Application of Artificial Intelligence in Intelligent Community**

### **3.1 Location of artificial intelligence in intelligent community**

Artificial intelligence technology plays a more and more important role in social development. In terms of the development of intelligent community itself, in the framework of specific organizations, professional and scientific methods are used to provide help and services to community heads. When artificial intelligence technology is integrated into the intelligent community, it will become a part of the intelligent community. Through more efficient services, it will bring new changes and improvements to the intelligent community. At present, artificial intelligence technology has made some achievements in the application of intelligent community, such as elderly care, housekeeping service and catering service in community service. Comparatively speaking, artificial intelligence technology is better than the traditional intelligent community. At the same time, through artificial intelligence technology, community archives management can be more scientific and convenient resource analysis.

### **3.2 The function of artificial intelligence in intelligent community**

The service objects in the intelligent community are different and have different characteristics. In social activities, artificial intelligence technology can be used to make up for the needs of specific groups. Both artificial intelligence and scientific innovation methods and means can act on community service. For example, establish a positive communication attitude among the elderly in the community. Through this specific way to achieve the specific functions of artificial intelligence in the intelligent community, so that the community residents more positive attitude to life, so as to play a positive role in promoting their own forward development. Therefore, through scientific

artificial intelligence technology can make the life of intelligent community residents better, and the development of the whole society can become more harmonious.

### 3.3 Application of artificial intelligence in intelligent community

The specific application of AI in the intelligent community includes the application of intelligent tools, the intellectualization of medical social work and the intellectualization of family services, as shown in Figure 2 below. AI technology can be applied to the community through intelligent tools to help community services make decisions and take actions. With the rapid development of intelligent technology, it has been well applied in home service.

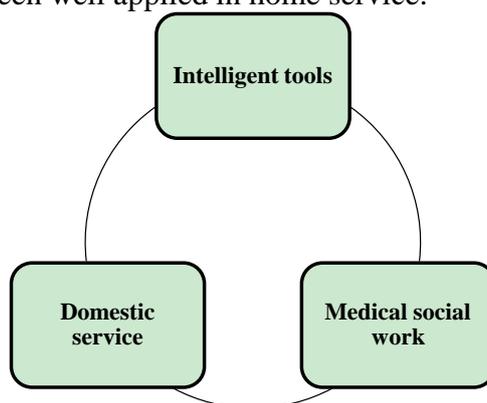


Figure2. The specific application of AI in the intelligent community

## 4. Application strategy of artificial intelligence in the process of intelligent community construction

### 4.1 Promote the cultivation of high-tech talents in intelligent community

At present, there are still many challenges in the cultivation of AI application talents in the intelligent community. For example, the training cycle of talents is relatively long, its in-depth learning needs a lot of resources support, high requirements for hardware, in a word, it has the characteristics of long investment return cycle. The cultivation of artificial intelligence talents should first optimize the talent structure and focus on training leading talents. The construction of intelligent community based on artificial intelligence is an intelligence intensive industry. If we want to gain an advantage in the industry of intelligent community, we must layout the relevant talent strategy as soon as possible. Guide the direction of talent training and development, exercise the ability of scientific and technological talents to solve problems, and adapt to the construction of intelligent community with artificial intelligence and big data as the core.

### 4.2 Strengthen infrastructure construction

The construction of intelligent community is based on information technology, which changes the previous management and service mode, and forms a new type of intelligent district. For example, the realization of security system automation, and the management automation. Integrate social public management technology with Internet of things technology, information network technology and automatic control technology to create an intelligent community residents' lifestyle, provide better services for the community, and provide a more convenient, safe and comfortable living environment.

### **4.3 Innovation of intelligent community construction mechanism**

As the main body of community, community residents are the power and guarantee to realize community autonomy and development. The construction of intelligent community based on artificial intelligence is aimed at serving community residents. In the establishment of intelligent community based on artificial intelligence, we should fully study the needs of community residents, and focus on the convenience of community refined management and the improvement of existing community infrastructure operation efficiency. The construction of the intelligent community should be based on the practical problems of the community and build the intelligent community with its own characteristics. In the process of community construction and development, it will be affected by many factors, especially the influence of community residents, so we should give full play to the main position and role of residents, and promote the harmonious development of community construction.

### **5. Conclusions**

Artificial intelligence technology plays an important role in the construction of intelligent community. Applying the development results of artificial intelligence to the construction of intelligent community, reasonable and scientific management can improve the quality and level of intelligent community service, and create a new community model. So as to realize the ultimate goal of artificial intelligence, which is to promote the convenience of community life and enhance people's communication and exchange.

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