In order to realize social equity and promote economic development, promoting the employment of persons with disabilities is a necessary way. First, according to the data of China Disabled Persons' Federation, the total number of disabled people in China has exceeded 85 million in 2018, distributed in 260 million families, of which about 32 million people are at the age suitable for employment, but only 9,484,000 people with disabilities in China are involved in employment, which accounts for only 29.6% of the total number of people with disabilities [10].

Second, in the traditional values of the United States, "equality" means equal opportunity, not equal results, and the U.S. government encourages individuals to work hard to improve their own situation, including people with disabilities [11]. At the same time, American society generally recognizes that people with disabilities have the same civil rights and employment opportunities. The U.S. government and society will also support their full participation in the labor force [12].

Overall, promoting the employment of people with disabilities can lead to a large workforce, thus achieving social justice.

Figure 1-Disability Prevalence in the General Population and Employment Rates Among Persons with Disabilities of Working Age

In order to improve the employment of people with disabilities, our team provides a method to control drones using electromechanical signals to enable them to perform agricultural irrigation. Nowadays electromechanical control is becoming more and more common in robotics as a muscle-computer interaction technique. Among them, electromyography (EMD) is widely used in biomedicine, prosthetics, and human-machine interfaces as a non-invasive and indirect brain-computer interface technology. However, there is also a problem that there is noise in EMD signals, which can affect the efficiency of human-computer interface [13].

In order to control the unmanned aerial vehicle (NAV), our team proposes systems such as Microsoft Kinect, which can help to realize the vision-based gesture recognition function [14]. This feature, which is easy to implement for hardware integration and fast processing of movements globally, has many advantages. However for controlling mobile robots, our team advocates Inertial Measurement Units (IMUs) and EMG systems that are both proven to be very effective [15]

For the capture of muscle activity, EMG is not only very effective, but it can also be converted into specific designated signals for electronic devices. Thus, EMG can output electrical signals based on muscle contraction and relaxation. In this case, using the signals from the shoulder muscles, which are processed, classified and collected in the prosthetic control system, the control of the device by EMG signals can be realized, and this technique is widely used in the field of prosthetics [17].