

Intelligent Human Pose Recognition Based on EMG Signal Analysis and Machine 3D Model

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Abstract : In the increasingly mature posture recognition technology, human movement information is widely used in sports rehabilitation, human-computer interaction, medical health, human posture assessment, and other fields today; this project uses the most original ideas; it is proposed to use the collection equipment for the collection of myoelectric data, reflect the muscle posture change on a degree of freedom through data processing, carry out data-muscle three-dimensional model joint adjustment, and realize basic pose recognition. Based on this, bionic aids or medical rehabilitation equipment can be further developed with the help of robotic arms and cutting-edge technology, which has a bright future and unlimited development space.

Keywords : pose recognition, 3D animation, electromyography, machine learning, bionics

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