

Interactive Shadow Play Animation System

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Abstract : The paper describes a Chinese shadow play animation system based on Kinect. Users, without any professional training, can personally manipulate the shadow characters to finish a shadow play performance by their body actions and get a shadow play video through giving the record command to our system if they want. In our system, Kinect is responsible for capturing human movement and voice commands data. Gesture recognition module is used to control the change of the shadow play scenes. After packaging the data from Kinect and the recognition result from gesture recognition module, VRPN transmits them to the server-side. At last, the server-side uses the information to control the motion of shadow characters and video recording. This system not only achieves human-computer interaction, but also realizes the interaction between people. It brings an entertaining experience to users and easy to operate for all ages. Even more important is that the application background of Chinese shadow play embodies the protection of the art of shadow play animation.

Keywords : shadow play animation, Kinect, gesture recognition, VRPN, HCI

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