

A shadow-puppet application

Introduction:

This is a Chinese shadow-puppet application based on Kinect SDK. At most two people will be detected and their body figure will be displayed by Shadow-puppet picture. People can get a spear by putting their hands up, and make it disappear by stamping their feet.

Implementation:

After getting the depthBuffer, pixelBuffer and skeletonBuffer from Kinect SDK, a body figure will be divided into 6 parts (head, body, left hand, right hand, left leg and right leg). Then shadow-puppets pictures are stick to corresponded position in each frame and resized by the size of body parts.

To capture people's action, a gesture class is used to keep tracking on people's skeleton and check each decided action. Each action will be divided into several parts and the action class keeps a current status on whether each part is accomplished or not.

