

Abstract

Nowadays the aging of population in Taiwan is a serious problem. The teenagers are busy in work so how to design an accompany robot with multifunction, even a playmate to children, is a worthwhile investment issue. Considering the elders' action is not convenient, we find the voice-controlled operation is a better way. In addition, we make the robot with singing, dancing and moving function. The core of robot is Arduino platform. As user talk to cell phone or input the control instruction, the phone communicates with the robots by Bluetooth. The robot has temperature and humidity sensors and the measured data is transmitted to the mobile phone through APP program. So users can read the living environment of the house in remote. Although the market have many type of robots, in order to study the foundation of learning, all the parts such as motor, wheel and shaft of the robot are assembled by ourselves. Then we design the main body and make clothing. So, it is a unique voice-activated robot in the world.

Keywords: voice-activated, accompany, robot, APP, Arduino