

Sense and Control of a Companion Robot

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Abstract

This paper illustrates the development of a companion robot, which is equipped with multiple tactile sensors and output devices to interact with human beings. We employ temperature and pressure sensors on the robot, and develop sensor networks to detect environmental changes. To make corresponding responses, motors and voice circuits are used to enhance the human-robot interactions. Furthermore, an embedded system is constructed to miniaturize the integrated robot system. From the results, development of the robot is deemed successful.