The Smart Bed to Protect Children from the High Temperature

Al-Marri, Khalifa

Eliwa, Ahmed

Children's high temperature is considered as one of the most important problems that parents face with their children. Our project aims to find a way to monitor the temperature of the body, and prevent it from rising in the case of illness of the child, especially when parents are being busy or sleeping. We have worked on this project to find an effective way to keep parents in contact with their children even during sleeping, using a temperature sensor placed under the armpit to track the temperature of the body and automatically turn on and off the alarm and cooling systems in the smart bed. Experiments were carried out on a simulated model using a toy as a model for a child. The heat sensor was brought closer to hot water instead of a high-temperature child to ensure that the system worked. The smart bed cooling system designed in the project consists of a cooling unit, a pump, an engine, a rubber mattress, and a connecting pipe. The operation of the system begins when the temperature measured by the heat sensor exceeds 37.5 ° C, the alarms, and the cooling system begin to operate. Where the sensitivity is linked to the father's mobile Bluetooth technology and home alarm system and cooling unit by wireless technology. The child's body is cooled down to the normal level when the sensor sends a message to stop the alarm and cooling systems. The work of the model was tested using hot water as an alternative to the child. When the sensor is approached from the hot water, the temperature rises and the intelligent bed systems begin to operate. When removed from the hot water, the temperature drops and the alarm and cooling systems stop working.

Awards Won: