

An Intelligent Baby Care System Based on IoT and Deep Learning Techniques

Authors : Chinlun Lai, Lunjyh Jiang

Abstract : Due to the heavy burden and pressure of caring for infants, an integrated automatic baby watching system based on IoT smart sensing and deep learning machine vision techniques is proposed in this paper. By monitoring infant body conditions such as heartbeat, breathing, body temperature, sleeping posture, as well as the surrounding conditions such as dangerous/sharp objects, light, noise, humidity and temperature, the proposed system can analyze and predict the obvious/potential dangerous conditions according to observed data and then adopt suitable actions in real time to protect the infant from harm. Thus, reducing the burden of the caregiver and improving safety efficiency of the caring work. The experimental results show that the proposed system works successfully for the infant care work and thus can be implemented in various life fields practically.

Keywords : baby care system, Internet of Things, deep learning, machine vision

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