

A Multi-Agent Intelligent System for Monitoring Health Conditions of Elderly People

Authors : Ayman M. Mansour

Abstract : In this paper, we propose a multi-agent intelligent system that is used for monitoring the health conditions of elderly people. Monitoring the health condition of elderly people is a complex problem that involves different medical units and requires continuous monitoring. Such expert system is highly needed in rural areas because of inadequate number of available specialized physicians or nurses. Such monitoring must have autonomous interactions between these medical units in order to be effective. A multi-agent system is formed by a community of agents that exchange information and proactively help one another to achieve the goal of elderly monitoring. The agents in the developed system are equipped with intelligent decision maker that arms them with the rule-based reasoning capability that can assist the physicians in making decisions regarding the medical condition of elderly people.

Keywords : fuzzy logic, inference system, monitoring system, multi-agent system

Conference Title : ICCSP 2014 : International Conference on Communications and Signal Processing

Conference Location : Istanbul, Türkiye

Conference Dates : June 19-20, 2014