Sensor-based Fully Automated Component for Fan: A Review

WCD Rathnasiri#, B Hettige

Department of Computer Engineering, Faculty of Computing, General Sir John Kotelawala Defence University, Sri Lanka

Abstract. Energy crisis can be considered as a big crisis in the world today. It will have a big impact on third world countries like Sri Lanka. As a result, we have to bear huge cost for electricity. Therefore, many people have paid attention to using electricity sparingly and reducing electricity consumption. To find a solution to the electricity crisis, this review paper discussed the impact of electric fans on electricity consumption in homes and offices and measures that can be taken to reduce them. For that, using the technology that is rapidly evolving in the world today, a fully automatic profitable device based on sensors can be proposed for electric fans as a solution. The device proposed here is expected to perform basically two functions. The first one is to control the fan on/off by human detection instead of manual switching of the system. The other function is to control the fan speed according to temperature changes. Finally, the purpose of this proposed design is to increase user comfort and reduce energy consumption.

Keywords: Sensor-based Automation Systems, Smart Devices, Motion Detection