Abstract

Ambient Intelligence in the modern era of research and innovations is an active field that uses various embedded computing devices for providing different types of interaction with environment. This paper describes a new methodology “Faculty Performance Monitoring Scale” abbreviated as “FPMS” aiming to improve the overall quality of existing education system utilizing an application of ambient intelligence. As designed, the methodology elaborates the mutual interaction among humans and service robotics having master-slave relationship in which humans act as a master and service robotics act as a slave. Human utilizes interface embedded in service robotics for giving instruction and service robotics will respond according to the instruction given by the master. The primary duty of service robotics is to store and monitor the faculty members at the time of lecture delivery and calculate their performance on the basis of certain parameters as considered in FPMS. The benefit to utilize this designed methodology is to reduce conflicts among faculty based upon biases’ and appreciation will be given on the basis of feedback from FPMS. An appropriate collaboration between human and service robotics leads to achieve a joint action and provides a mechanism of active team
participation utilizing a more natural form of interactions. The proposed architecture design has been compared with the current education system and may be followed by the educational institutes for maintaining efficiency as the case thereof.

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Index Terms

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Keywords

Ambient Intelligence, Service Robotics, Sensors, micro-chip, performance, Education system, Faculty.