3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during year

Academic Year	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	Affiliating Institute at the time of publication	Name of the publisher	Academic Year
2021-22	Dr. M.Amanullah	RENEWABLE ENERGY WITH IoT AND BIOMEDICAL APPLICATIONS / Inflexible Wireless Health Surveillance Sensor Shields for Health-Care Apps Associated with the IoT -	-	-	-	978-81-952585-4-3	Aalim Muhammed Salegh College of Engineering	Dipi Press OPC Pvt Limited, Chennai

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Inflexible Wireless Health Surveillance Sensor Shields for Health-Care Apps Associated with the IoT

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Abstract

This same Artificial intelligence is a modern model of connectivity that allows components from different fields to be linked via the internet. In the new world of health care, the existing medical system needs more and more social services, such as physicians, nurses, hospital beds and health tracking systems, one of the best IoT technologies is presented. In this article, we present to quantify the numerous biological signals, such as the Echocardiogram (ECG, photopsymography (PPG), and body temperature, the lightweight wearable sensor patchs. Since the ECG and PPG sensors are combined into the same system, the proposed sensor patch will be used to constantly estimate blood pressure (BP) without additional wires and equipment, depending on the pulse arrival time (PAT). The Patch consists of a central panel for signal procurement and analysis, a battery control board and three sensors for the recording of signals. Both modules are designed in a rigid-flex design, which for remote health monitoring applications can be conveniently connected to the human body. For tailored measurements of a certain physiological signal, the sensors may be removed from the centre board to reduce power consumption. Experiments are performed in compare to a commercial reference unit to verify the performance of the proposed sensor patch. The proposed sensor device will relay anthropometric signals wirelessly to the gateway by incorporation of a miniaturised Bluetooth Low pacth and gateways, data encryption is implemented to secure data during transfer, for privacy and for security purposes. The bridge between the wearable sensor device and the Internet cloud is built to provide the health data to be processed and further analysed, both for a handheld (mobile phone based) and a fixed gateway (portable computer based). The viability of the IoT based healthcare software overall platform is shown by experimental findings.

INTRODUCTION

In different research areas, Internet of Things (IoT) has attracted tremendous interest. Many elements from various areas can be hooked up to IoT technologies and can exchange information and services without time and distance restrictions[1],[2]. One of the most enticing IoT technologies is the current healthcare[3]. Chronic diseases are one of the biggest problems in the wellbeing of the worldwide population with the growing lifetime of the human being[4].

Initial diagnosis and treatment of various diseases can improve the health conditions of patients and involves the continual observation of the health of human signs such as the rhythm of heart (HR), breathing rate (RR), blood pressure (BP), temperature of the body, etc. [5]. There is insufficient social capital (doctors, nurses, hospital beds and treatment facilities) in the conventional healthcare sector, compared with the growing elderly[6]. A potential option for the future health tracking market `technologies.