Retraction

Retraction: Health Monitoring System Using IOT Sensors Network (J. Phys.: Conf. Ser. 1916 012146)

Published 23 February 2022

This article (and all articles in the proceedings volume relating to the same conference) has been retracted by IOP Publishing following an extensive investigation in line with the COPE guidelines. This investigation has uncovered evidence of systematic manipulation of the publication process and considerable citation manipulation.

IOP Publishing respectfully requests that readers consider all work within this volume potentially unreliable, as the volume has not been through a credible peer review process.

IOP Publishing regrets that our usual quality checks did not identify these issues before publication, and have since put additional measures in place to try to prevent these issues from reoccurring. IOP Publishing wishes to credit anonymous whistleblowers and the Problematic Paper Screener [1] for bringing some of the above issues to our attention, prompting us to investigate further.

[1] Cabanac G, Labbé C and Magazinov A 2021 arXiv:2107.06751v1

Retraction published: 23 February 2022
Health Monitoring System Using IOT Sensors Network

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Abstract. In healthcare not only sensory instruments, but also in connectivity, recording and display systems, technology plays an important role. It is important to keep track of different medical parameters and post-operative days. As a result, the most recent advancement in healthcare communication methods using IOT and LIFI has been adopted. The Internet of Things (IoT) acts as a catalyst for healthcare and is used in a wide variety of applications. The Arduino microcontroller is used as a conduit in this project to connect with a variety of sensors, including a temperature sensor, a respiratory sensor, and a heart rate sensor. The microcontroller collects sensor information and transmits it via IOT to the network, and thus monitors medical parameters in real time. The physician will view the data at any time. Furthermore, the controller is attached to the buzzer to signal the controller to change the sensor output. The key problem with remote patient surveillance systems is that only approved users can view data remotely and provide the data for the target end. The issue of protection can be solved by sending documents over the internet, which is secured by password, and the doctors will access the information via the html web page. Warning message is sent to the doctor via IOT attached to the controller next to the instance of extremity. This is why this machine can effectively accomplish rapid provisional medicines. With low energy consumption, fast set-up, high performance and time to time response, this device is capable.

Keywords: Healthcare, Services, Software, Technology, Arduino, Atmega, Internet of Things, Wireless Data Transfer, Cost Effective, Patient Monitoring, Android Device, Sensors, GSM Module.

1. INTRODUCTION
The electronic health care facilities nowadays are making an important contribution to medical electronic sensors (E-sensors). One of the big advances in technology is patient electronic health (E-Health) surveillance [1].

In this case the temperature sensor, heartbeat sensor and pulse and heart rhythm are used respectively to measure the patient's body temperature [2]. This is why thermometer is used in the home to monitor body temperature before doctor's treatment. This suggested model (devices) will be used as a consulting service to verify the state of the patient's wellbeing in the home, or it would become very expensive for the patient involved to visit physicians or go into diagnostic centres [3]. For this purpose the design of an advanced/high-efficiency integrated health portable monitoring device based on Arduino microcontrollers is defined.
As one parameter indicates, a patient's heart rate is calculated by putting the index finger on the IRD sensor, then measuring the pulse rate. The heart rate and information about the body temperature is then transmitted via IOT to the webserver [4].

2. LITERATURE SURVEY

A. COVID19 EARLY DETECTION BY DEEP MODEL TRANSFER FOR ISOLATED RURAL AREAS

The World Health Organization is proposing a broad application of COVID 19 assessments in order to tackle the transmission of COVID 19. These assessments, regrettably, are costly and are not available for rural and isolated populations and cannot be carried out. A smart clinical decision support system (SADC) to remedy this issue will be developed to early detection COVID 19 from chest X-rays that are more available to rural residents [5].

B. North Africa crisis: the use by health indicators Analysis of COVID19

Any nation in the world is confronted with an extraordinary crisis, where the policies implemented against COVID19 differ from country to country. In North Africa, although the area is close to Europe, the number of confirmed cases has been small. In this research [6].

C. THE ANALYSIS OF COVID19 – NEW CORONA LEARNING TECHNIQUES - PANDEMIC SPREAD DATA

coronaviruses are a category of viruses that cause mammalian and bird diseases. a variety of respiratory diseases occur in humans. this paper introduces the study of covid19 propagation and forecasts the magnitude, recovery rate and fatality rate of the pandemic [7].

D. MOBIL DATABASE AND REAL DURING THE COVID19 PANDEMIC DEVELOPMENT OF PERSONAL MONITORING SYSTEM

Coronavirus Disease 19 (COVID19) is a new coronavirus disease known as severe coronavirus acute respiratory disease 2. (SARS-CoV-2). Almost the whole planet has been affected by 47.5 million people and 1.2 million deaths in this epidemic, so that WHO classifies the outbreak as a global pandemic [8].

3. PROPOSED SYSTEM

The Internet of Things (IoT) is the new model, which comprises a large number of intelligent objects and smart devices that communicate with each other over the internet. In several areas, IoT devices are used that make the daily routine of users easier [9].

This intelligent instruments are used to measure the patient's state in order to capture temperatures, blood pressure, sugar levels, etc. The challenge in the IoT is to communicate the data gathered to the physician, make exact decisions about the data obtained and to contact the patient. PHMS shall also notify patients of potential precautions to be taken [10].

This system provides the patient with immediate attention and the next move in case of urgent circumstances. We are introducing a new way of using the IoT-based Patient Health Surveillance System with Arduino Uno. Arduino microcontroller ATMEGA 328P handles data provided by the sensors [11].

ESP8266 offers unmatched ability in some applications to embed Wi-Fi functionality. It provides a complete and self-contained Wi-Fi networking solution and can be used for application hosting or download from another application processor with Wi-Fi networking functions. The arduino data were made possible by the use of the Wi-Fi module on the website of IoT thinkspeak.com.

The PHMS also informs the patient of future precautionary steps. This method proposes that the patient receiving medical attention and follows the next move in crucial situations Promote social distancing practices through the use of technology Figure 1.

➢ Support contact tracing protocols to track the spread of COVID-19.
➢ Provide data to support compliance with local, state, and federal health guidelines.
➢ Preventing fines for failure to comply.
➢ Promote employee physical and psychological safety.

![Figure 1: Basic Architecture](image1)

**E. ARDUINO UNO**

An Arduino UNO is the use of the microcontroller. The UN is an ATMEGA 328P-based microcontroller module. 32 kB of flash memory are available in ATMEGA 328P to store code. The board consists of 14 optical pins for input and outputs, 6 analogue inputs, 16 MHz quartz crystal, USB and ICSP. Use the Arduino app to program the UNO Figure 2.

![Figure 2: Arduino UNO](image2)

**F. SENSORS**

Sensor is a computer, module, machine or subsystem that relies on the transducer in the atmosphere to detect events or adjustments and transmits information also to other electronics, a microcontroller. For most electronics, a sensor is still used.

- Sensor of temperature
- Sensor of pressure
- Pulse sensor Heart Rate
Sensor of breathing

G. ESP8266 WIFI

A low cost Wi-Fi chip with complete TCP/IP functionality, the arduino-compatible ESP8266 is a stunningly built-in MCU (Micro Controller Unit) that allows you to manipulate I/O digital pins via simple almost pseudo-code-like programming language. This computer is manufactured by Espressif Systems, a China based in Shanghai Figure 3.

![ESP8266](image)

Figure 3: Wi-Fi (ESP8266)

H. Light-Emitting Diode (LED)

Connect the long leg of the LED to the other end of the resistor (the good leg, which is called the anode). Connect the LED (negative leg, known as the cathode) to the GND. In the following diagram we present a UNO board with the LED BUILTIN value, D13 Figure 4.

![LED Display](image)

Fig 4: LED Display

4. SYSTEM IMPLEMENTATION

The project phase is system implementation as theoretical architecture is integrated into the work system. The system implementation If it is not closely monitored and prepared, the implementation system stage can create chaos. Therefore, it can be seen as the most vital phase of efficient new systems and the reliance of consumers on the efficiency and effectiveness of the system.

- A thorough plan for the new structure, control limits and the execution are part of the implementation stage in a project.
- The recently created system trains its employees.

After navigating the entire project life cycle process, a software programme is generally deployed. Different life cycle phases including demand review, concept phase, checking and monitoring followed, result in efficient project management and finally the execution phase. After many life-cycle processes described above, the software application which is essentially a Windows-based application was deployed successfully Figure 5.
Different considerations, such as programme climate, user management, safety, usability and ultimately efficiency, would be taken into account in the software in a high-quality industrial field. These variables are evaluated gradually and before the final application the positive as well as negative results are reported. Both the customer level and the administration level ensure security and authentication. The data is stored in MySQL, which is extremely dependable and user friendly, and user safety is handled with the use of login options and sessions to eventually encrypt all transactions. The applications are validated with the levels of entry required in different modules being taken into account. The right data to be fed into the database can be guaranteed with possible constraints including number format, date formatting and confirmations for both the save and the upgrade options. Both aspects are then identified and the whole project analysis for the end users is effectively applied.

Figure 5: BLOCK DIAGRAM

Figure 6: System Implementation
5. **RESULT**

In this, we analysed the IoT health surveillance system based on the microcontroller. Any anomalies in the states of health may be directly identified and are told over the internet to the individual. The method suggested is clear, powerful and understandable. It serves as a connection between patient and physician. The project hardware is deployed and the results are successfully tested.

6. **CONCLUSION AND FUTURE SCOPE**

In order to enhance the healthcare accoutrement in an address accompanying total casework, patient welfare monitoring outside the apple agree has begun to analyse various abstruse explications. As any typical method idea, right from the production phase this framework is still used. As heavy and as lourd as a separate handle In addition, costs require additional assistance in comparison to the propelling system Moreover, more than 1 minute detracts from making the right thing happen.

The ECG, Blood Pressure and Temperature Control device takes less than one minute to compute. Scope reduces, since the combination of medicinal data sensors on a single component, similar to the conservative approach. So, the complication of time costs is minimised.

ATmega, an additional outlying controller for gesture acclimatisation is needed here. PIC controller. Time-cost, capacity and improves storage. Therefore, as outward circumstances equally increase prices and mem-sizes. This study arranged this well-being of the patient.

Patient-suggested nursing scheme according to criteria. Due to the wireless network sensor and internet data transmission. This makes it easy to reach both health-related data and data of the patients on the smartphone. Therefore, we should not go to the sanatorium any stage and a letter to the medical person will receive immediate treatment consistent with the patient's health problems.

Two parameters (Heartbeat, temp) can be posted in the current version of the system on the internet. But improvements can still be made. Few other parameters can be measured, for example blood pressure level, glucose level (BMI), circumference of the waist etc. Then the patient's entire health condition is recorded and easily accessible on the web. This will make it much easier for the doctor, now and then, to monitor the progress of the patient's health. The system can be expanded by additional features such as the linking of ambulance, leading list of doctors and their specialties, hospitals and special facilities, etc. Through mobile applications doctors can sensitisise themselves to diseases and their symptoms. From the evaluation and analysis results, the system will improve the medical evaluation of patients and the doctor.

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