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(54) Title of the invention : PREDICTIVE HYGIENE FOR HEALTH MONITORING AND RISK REDUCTION USING MACHINE LEARNING

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Filing Date :NA

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5)SHAIK MUNNISA BEGUM
6)NELLOJU PRIYANKA
7)Dr. A. MANIKANDAN
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(57) Abstract :
Abstract Hygiene is an important aspect in maintaining public health, particularly in areas prone to disease transmission, such as hospitals, schools, and public facilities. Traditional hygiene monitoring systems are frequently manual and reactive, resulting in slow responses and 5 increased health hazards. Predictive hygiene uses machine learning (ML) to provide realtime health monitoring and early danger detection. ML systems like Random Forest and Support Vector Machines can detect hygiene breaches and predict probable contamination incidents by processing data from Io T sensors, environmental factors, and behavioural patterns. This proactive method allows for quick interventions, which improves hygiene 10 compliance and lowers infection rates. The system continuously learns from historical and real-time data to adapt to changing hygiene dynamics, resulting in better decision-making. Predictive hygiene, with its ability to recognise trends and forecast results, enables scalable and effective health risk management. Integrating ML-driven hygiene solutions helps to move public health efforts towards preventive, data-driven approaches in clinical and 15 community settings.

No. of Pages : 17 No. of Claims : 6

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Government of India

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Application Details	
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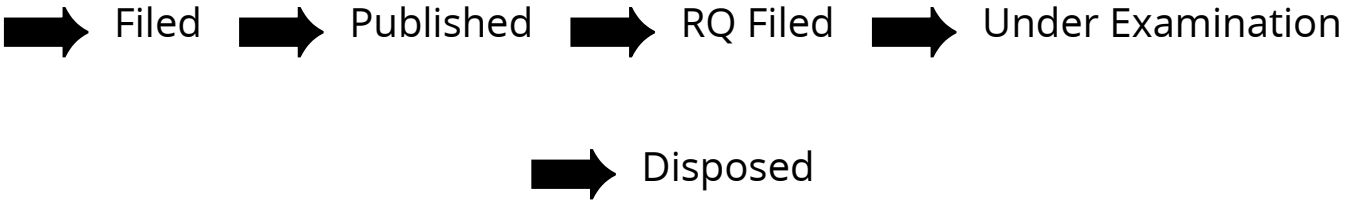
DATE OF FILING	28/04/2025
APPLICANT NAME	1 . CHALLA SUNDEEP BABU 2 . S. SABIYA SULTANA 3 . PRASADU GURRAM 4 . PIRANGI HYMAVATHI 5 . SHAIK MUNNISA BEGUM 6 . NELLOJU PRIYANKA 7 . Dr. A. MANIKANDAN 8 . A. LAKSHMI NARAYANA
TITLE OF INVENTION	PREDICTIVE HYGIENE FOR HEALTH MONITORING AND RISK REDUCTION USING MACHINE LEARNING
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	kirann.intell@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	23/05/2025

Application Status

APPLICATION STATUS	Awaiting Request for Examination

			View Documents



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Document Name	*Created Date/Uploaded Date
202541040761-Form 1-280425.pdf	16/05/2025
202541040761-Form 2(Title Page)-280425.pdf	16/05/2025
202541040761-Form 9-280425.pdf	16/05/2025

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28 APR
INDIA, PATENT OFFICE, CHENNAI

PT 880

D/H2578.

"FORM 1
THE PATENTS ACT 1970 (39 of 1970) and
THE PATENTS RULES, 2003 **APPLICATION FOR GRANT OF PATENT**
(See section 7, 54 and 135 and sub-rule (1) of rule 20)

(FOR OFFICE USE ONLY)

710111797

Application No.	202541040761
Filing date:	28-04-2025
Amount of Fee paid:	17501-
CBR No:	25240
Signature:	28/4/25

1. APPLICANT'S REFERENCE /IDENTIFICATION NO. (AS ALLOTTED BY OFFICE)

2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]

Ordinary (✓)		Convention ( )		PCT-NP ( )	
Divisional ( )	Patent of Addition ()	Divisional ( )	Patent of Addition ( )	Divisional ( )	Patent of Addition ( )

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1

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Mr. A. LAKSHMI NARAYANA	INDIAN	INDIA	Street	Ibrahimpatnam, R. R. District
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			State	Telangana
			Country	India
			Pin code	501 506

3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]

Natural Person (✓)	Other than Natural Person		
	Small Entity ( )	Startup ( )	Others ( )

4. INVENTOR(S) [Please tick (✓) at the appropriate category]

Are all the inventor(s) same as the applicant(s) named above?	Yes (✓)	No ( )

If "No", furnish the details of the inventor(s)

5. TITLE OF THE INVENTION: **PREDICTIVE-HYGIENE FOR HEALTH MONITORING AND RISK REDUCTION USING MACHINE LEARNING**

~~**6. AUTHORISED REGISTERED PATENT AGENT(S)**~~	~~IN/PA No.~~	
	~~Name~~	
	~~Mobile No.~~	
7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA	Name	CHALLA SUNDEEP BABU, Assistant Professor, Department of Computer Science and Engineering, Keshav Memorial Institute of Technology
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	Telephone No.	
	Mobile No.	+ (91) – 94937 60048
	Fax No.	
	E-mail ID	kirann.intell@gmail.com, sundeepchallakmit@gmail.com

~~**8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN CONVENTION COUNTRY, PARTICULARS OF CONVENTION APPLICATION**~~

Country	Application Number	Filing date	~~Name of the applicant~~	~~Title of the invention~~	~~IPC (as classified in the convention country)~~

~~9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT)~~

~~International application number~~	~~International filing date~~

~~10. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION~~

~~Original (first) application No.~~	~~Date of filing of original (first) application~~

~~11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT~~

~~Main application/patent No.~~	~~Date of filing of main application~~

12. DECLARATIONS

(i) Declaration by the inventor

(**In case the applicant is an assignee**: the inventor may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).

We, the above-named inventor is the true & first inventor for this Invention and declare that the applicant herein is our assignee or legal representative.

(a) Date: 25/04/2025
(b) Signature: Sundeep
(c) Name: CHALLA SUNDEEP BABU

(a) Date: 25/04/2025
(b) Signature: S. Sabiya Sultana
(c) Name: S. SABIYA SULTANA

(a) Date: 25/04/2025
(b) Signature: Prasadu
(c) Name: PRASADU GURRAM

(a) Date: 25/04/2025
(b) Signature:
(c) Name: PIRANGI HYMAVATHI

(a) Date: 25/04/2025
(b) Signature:
(c) Name: SHAIK MUNNISA BEGUM

(a) Date: 25/04/2025
(b) Signature:
(c) Name: NELLOJU PRIYANKA

(a) Date: 25/04/2025
(b) Signature:
(c) Name: Dr. A. MANIKANDAN

(a) Date: 25/4/2025
(b) Signature:
(c) Name: Mr. A. LAKSHMI NARAYANA

~~(ii) Declaration by the applicant(s) in the convention country~~

~~(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)~~

~~I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.~~

~~(a) Date~~

~~(b) Signature(s)~~

(c) ~~Name(s) of the signatory~~

(iii) Declaration by the applicant(s)

We the applicant(s) hereby declare(s) that: -

We are in possession of the above-mentioned invention.

The provisional/complete specification relating to the invention is filled with this Application.

- ☐ The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us-NA
- ☐ There is no lawful ground of objection(s) to the grant of the Patent to me/us. - NA

We are the true & first inventor(s).

We are the assignee or legal representative of true & first inventor(s).

- ☐ The application or each of the applications, particulars of which are given in Paragraph-8, was the first application in convention country/countries in respect of my/our invention(s)-NA

We claim the priority from the above-mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which We derive the title.

- ☐ My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9- NA

The application is divided out of my /our application particulars of which is given in Paragraph-10 and pray that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act

- ☐ The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph-11 – NA

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

(a) Form 2

Item	Details	Fee	Remarks
Complete/ provisional specification) #	No. of pages - One		
No. of Claim(s)	No. of claims Six and No. of pages – One		
Abstract	No. of pages - One		
No. of Drawing(s)	No. of drawings and No. of pages – Nine and Five		

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

(b) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).

(c) Sequence listing in electronic form

(d) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).

(e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS.

(f) Translation of priority document/Specification/International Search Report/International Preliminary Report on Patentability.

(g) Statement and Undertaking on Form 3

(h) Declaration of Inventorship on Form 5

(i) Power of Authority

(j).....

Total fee Rs. 4,500.00 paid by cash.

We hereby declare that to the best of our knowledge, information and belief the fact and matters slated herein are correct and we request that a patent may be granted to us for the said invention.

Dated this Monday of 28th of April 2025.

(a) Signature:
(b) Name: CHALLA SUNDEEP BABU

(a) Signature:
(b) Name: S. SABIYA SULTANA

(a) Signature:
(b) Name: PRASADU GURRAM

(a) Signature:
(b) Name: PIRANGI HYMAVATHI

(a) Signature:
(b) Name: SHAIK MUNNISA BEGUM

(a) Signature:
(b) Name: NELLOJU PRIYANKA

(a) Signature:
(b) Name: Dr. A. MANIKANDAN

(a) Signature:
(b) Name: Mr. A. LAKSHMI NARAYANA

To,
The Controller of Patents
The Patent Office, at Guindy, Chennai – 600 032.

Note: -

* Repeat boxes in case of more than one entry.
* To be signed by the applicant(s) or by authorized registered patent agent otherwise where mentioned.
* Tick (✓)/cross (x) whichever is applicable/not applicable in declaration in paragraph-12.
* Name of the inventor and applicant should be given in full, family name in the beginning.
* Strike out the portion which is/are not applicable.
* For fee: See First Schedule";

THE GAZETTEE OF INDIA – EXTRAORDINARY [PART II—Sec 3(ii)]

FORM 2
THE PATENT ACT 1970
(39 of 1970)
&
The Patents Rules, 2003
PROVISIONAL/COMPLETE SPECIFICATION
(See Section 10 and Rule 13)
COMPLETE

PREDICTIVE HYGIENE FOR HEALTH MONITORING AND RISK REDUCTION USING MACHINE LEARNING

1. APPLICANT

(a) NAME: CHALLA SUNDEEP BABU, S. SABIYA SULTANA, PRASADU GURRAM, PIRANGI HYMAVATHI, SHAIK MUNNISA BEGUM, NELLOJU PRIYANKA, Dr. A. MANIKANDAN, Mr. A. LAKSHMI NARAYANA

The following specification particularly describes the invention and the manner in which it is to be performed

Field of Invention

This system integrates health informatics, environmental monitoring, and artificial intelligence, with a focus on preventive healthcare. It combines IoT (Internet of Things) technologies with smart sensing and Machine Learning (ML) to offer intelligent hygiene management in real-world settings. Common applications include hospital infection control, public health surveillance, cleanliness monitoring in schools and workplaces, and transportation hygiene systems. By gathering real-time data on environmental variables, human activity, and hygiene habits, the system gives predictive insights to lower the risk of infection and contamination. ML models improve the ability to recognise abnormalities, predict risk patterns, and make prompt decisions. This multidisciplinary discipline combines computer science, biomedical engineering, public health, and environmental science to develop scalable and adaptable solutions that increase hygiene compliance and promote overall health safety in high-risk and densely inhabited areas.

Background of Invention

Maintaining high hygiene standards is critical for preventing the transmission of infectious illnesses and protecting public health, especially in highly populated or high-risk areas. Traditional hygiene monitoring systems frequently rely on physical inspections, periodic audits, and human reporting, which can be ineffective and reactive. These constraints have highlighted the need for more intelligent, data-driven methods to hygiene management. With the proliferation of IoT devices and advances in ML, it is now possible to continuously monitor hygiene-related data and anticipate potential health problems before they occur. ML algorithms can analyse enormous amounts of sensor data, discover patterns, and predict hygiene infractions with high accuracy. This proactive strategy facilitates faster responses, increases compliance, and improves overall safety. Using real-time analytics and intelligent predictions, predictive hygiene systems offer a scalable approach for improving cleanliness standards in hospitals, schools, industrial settings, and public transit systems.

Object of Invention

- Raspberry Pi 4
- Temperature Sensor
- Humidity Sensor
- Air Quality Sensor
- Proximity Sensor
- Touch Sensor
- Motion Sensor
- Bluetooth Module

Summary of Invention

In recent years, the combination of IoT technology and Machine Learning (ML) has transformed hygiene monitoring, shifting the paradigm from human inspections to intelligent, automated solutions. These systems are especially effective in healthcare facilities, public places, educational institutions, and industrial settings where hygiene directly affects health and safety. Traditional hygiene approaches frequently rely on reactive cleaning schedules or visual inspections, which are not necessarily effective. The current technique uses sensor-based data collecting, real-time monitoring, and predictive analytics to improve hygiene standards proactively. An embedded IoT sensor network serves as the system's backbone. These sensors collect real-time data on environmental and behavioural factors influencing cleanliness. Temperature sensors, such as the DHT22, can identify places where high temperatures may promote microbial development. Humidity sensors, such as the SHT31, monitor moisture levels to avoid mould and bacterial growth. Air quality sensors, such as the CCS811, detect dangerous gases or contaminants that might impair hygiene. Motion and proximity sensors (e.g., HC-SR501 and VL53L0X) detect human movement in sensitive areas and can trigger cleaning warnings or record hygiene compliance. Additionally, touch sensors monitor surface interactions, providing critical information on high-contact areas.

The Raspberry Pi 4 is the system's central microcontroller. Unlike basic microcontrollers, the Raspberry Pi 4 has extensive computational capabilities, including multi-core processing and Linux-based OS compatibility, allowing it to execute machine learning models locally and manage real-time sensor data streams. It also offers edge computing, which is crucial in circumstances where rapid decision-making is required without the use of cloud connectivity. The Raspberry Pi 4 is suitable for handling several sensors' data at the same time, interpreting it, and delivering actionable insights like hygiene alarms or predictive maintenance schedules. The system communicates via the Bluetooth Module (HC-05). This module enables reliable, low-power, short-range data transmission between the Raspberry Pi and nearby devices such as tablets or smartphones. This local communication technique is especially successful in situations with restricted internet connectivity, allowing hygiene monitoring to continue continuous. The HC-05 enables authorised users to monitor sensor data, receive alarms, and configure the system without requiring a continuous online connection, which improves both security and usability.

Machine Learning provides intelligence to the system by analysing sensor data and learning from patterns. Support Vector Machines (SVM) and Random Forest algorithms can be used on the Raspberry Pi to detect anomalies, predict future hygiene hazards, and automate solutions. For example, the system may forecast when a surface needs to be cleaned based on previous contact frequency, environmental variables, and movement patterns. It gradually adapts and improves its predictions, minimising unwanted alarms while maintaining high hygiene standards. It enables rapid hygiene actions, minimises manual monitoring responsibilities, and promotes data-driven decision-making to keep the environment clean and safe. By combining low-cost technology with powerful analytics, the system provides scalable hygiene solutions for both small- and large-scale applications.

Detailed Description of Invention

The Raspberry Pi 4 is a sophisticated microcontroller that runs a full operating system (Linux), providing additional versatility for dealing with complicated sensor data, real-time analytics, and machine learning. It can handle additional processing power, making it perfect for sophisticated hygiene monitoring systems that demand data storage, cloud integration, and real-time decision-making. The Raspberry Pi 4 is extremely customisable and provides a variety of connecting choices.

Temperature sensors are critical in detecting aberrant heat levels, which might indicate dirty surroundings or places suitable to germ growth. These sensors aid in detecting potentially contaminated surfaces or places at danger of infection. Embedded sensors, such as the DHT22, provide real-time temperature readings to verify hygiene compliance in a variety of scenarios.

Humidity sensors are essential for monitoring moisture levels in surroundings, as high humidity can encourage bacterial or fungal growth. Sensors like the SHT31 detect hygiene failures or health concerns by continuously detecting environmental humidity. These embedded sensors provide reliable measurements, which are critical for maintaining hygiene requirements.

Air quality sensors detect the presence of dangerous particles, gases, or contaminants in the atmosphere, which might impact hygiene levels. Sensors, such as the CCS811, use embedded models to monitor VOCs, CO_2, and particulate matter in real-time, predicting contamination hazards and maintaining cleaner, healthier surroundings.

Proximity sensors, such as the VL53L0X, detect the presence of people in hygiene-critical places like sanitation stations or high-touch surfaces. When these embedded sensors detect human activity, they automatically activate cleaning systems or alarms, assisting in the prevention of contamination and ensuring that hygiene practices are followed consistently in real time.

Touch sensors, such as the TTP223, detect the frequency and position of human touch on surfaces like doorknobs, handrails, and disinfectant dispensers. These sensors assist track hygiene practices and detect places that need to be cleaned or disinfected, ensuring that surfaces remain safe and free of infection.

Motion sensors, such as the HC-SR501, are installed to monitor human movement in hygiene-sensitive locations. These sensors measure hygiene compliance in real time by detecting behaviours such as handwashing and surface touch. They offer valuable data for forecasting hygiene concerns and providing correct sanitation practices in different environments.

The HC-05 Bluetooth module enables short-range communication between the hygiene monitoring system and a nearby device (such as a smartphone or tablet). It is suited for small-scale deployments or systems that just require local connection, giving a dependable, low-power choice for real-time sensor data transmission.

Drawings

Block Diagram

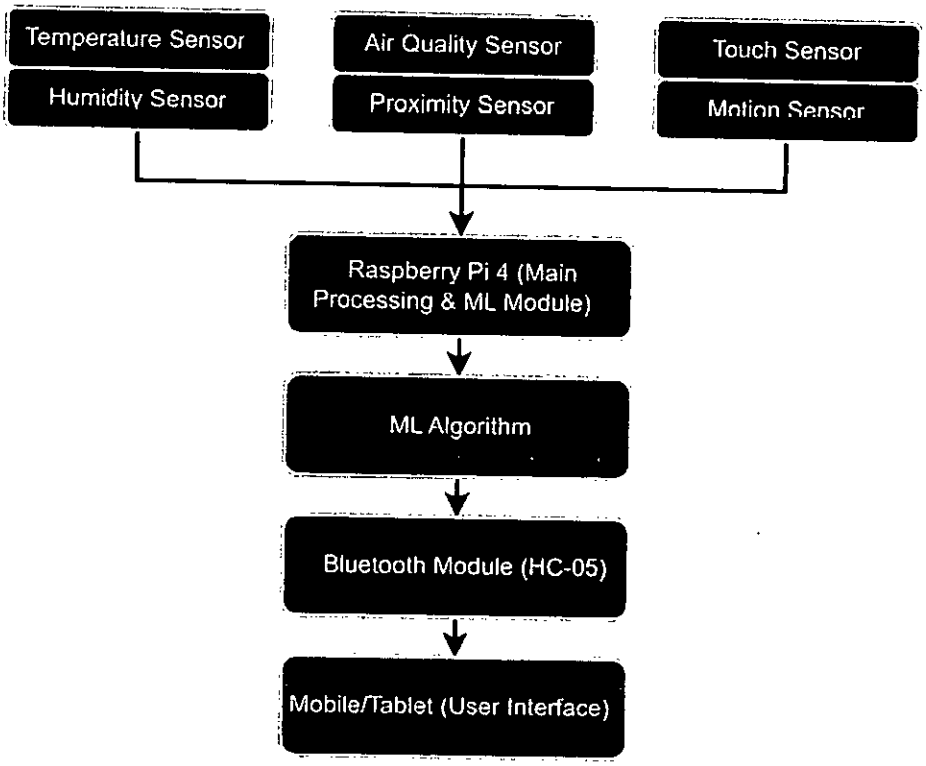

Figure (i) shows the Block Diagram

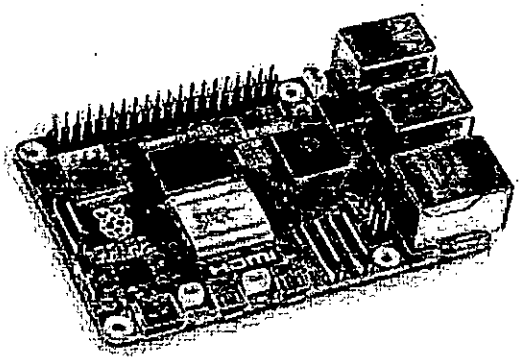

Figure (ii) shows the Raspberry Pi 4

5

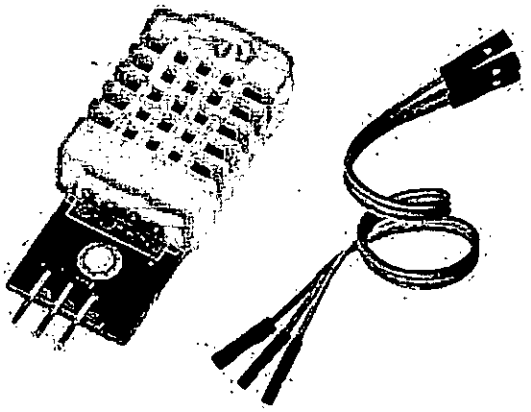

Figure (iii) shows the Temperature Sensor

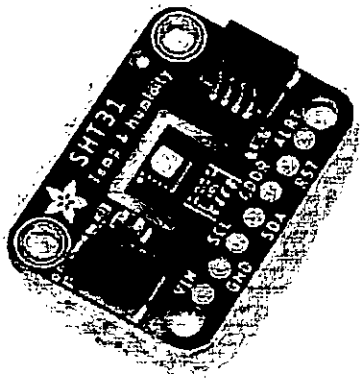

Figure (iv) shows the Humidity Sensor

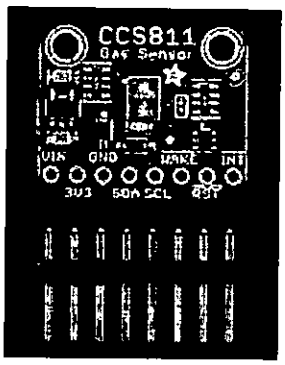

Figure (v) shows the Air Quality Sensor

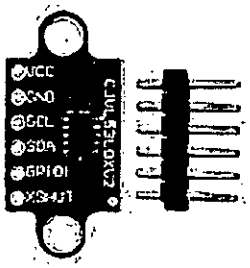

Figure (vi) shows the Proximity Sensor

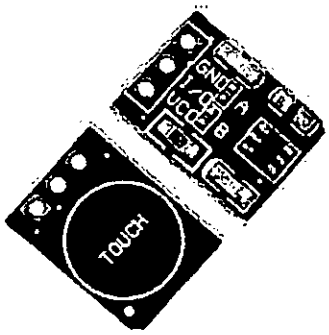

Figure (vii) shows the Touch Sensor

Figure (viii) shows the Motion Sensor

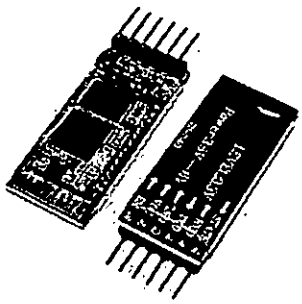

Figure (ix) shows the Bluetooth Module

Detailed Description of Drawings

(1) Figure (i) shows the Block Diagram

(2) Figure (ii) shows the Raspberry Pi 4

The Raspberry Pi 4 is a sophisticated microcontroller that runs a full operating system (Linux), providing additional versatility for dealing with complicated sensor data, real-time analytics, and machine learning. It can handle additional processing power, making it perfect for sophisticated hygiene monitoring systems that demand data storage, cloud integration, and real-time decision-making. The Raspberry Pi 4 is extremely customisable and provides a variety of connecting choices.

(3) Figure (iii) shows the Temperature sensor

Temperature sensors are critical in detecting aberrant heat levels, which might indicate dirty surroundings or places suitable to germ growth. These sensors aid in detecting potentially contaminated surfaces or places at danger of infection. Embedded sensors, such as the DHT22, provide real-time temperature readings to verify hygiene compliance in a variety of scenarios.

(4) Figure (iv) shows the Humidity sensor

Humidity sensors are essential for monitoring moisture levels in surroundings, as high humidity can encourage bacterial or fungal growth. Sensors like the SHT31 detect hygiene failures or health concerns by continuously detecting environmental humidity. These embedded sensors provide reliable measurements, which are critical for maintaining hygiene requirements.

(5) Figure (v) shows the Air quality sensor

Air quality sensors detect the presence of dangerous particles, gases, or contaminants in the atmosphere, which might impact hygiene levels. Sensors, such as the CCS811, use embedded models to monitor VOCs, CO_2, and particulate matter in real-time, predicting contamination hazards and maintaining cleaner, healthier surroundings.

(6) Figure (vi) shows the Proximity sensor

Proximity sensors, such as the VL53L0X, detect the presence of people in hygiene-critical places like sanitation stations or high-touch surfaces. When these embedded sensors detect

human activity, they automatically activate cleaning systems or alarms, assisting in the prevention of contamination and ensuring that hygiene practices are followed consistently in real time.

(7) Figure (vii) shows the Touch sensors

Touch sensors, such as the TTP223, detect the frequency and position of human touch on surfaces like doorknobs, handrails, and disinfectant dispensers. These sensors assist track hygiene practices and detect places that need to be cleaned or disinfected, ensuring that surfaces remain safe and free of infection.

(8) Figure (viii) shows the Motion sensor

Motion sensors, such as the HC-SR501, are installed to monitor human movement in hygiene-sensitive locations. These sensors measure hygiene compliance in real time by detecting behaviours such as handwashing and surface touch. They offer valuable data for forecasting hygiene concerns and providing correct sanitation practices in different environments.

(9) Figure (ix) shows the Bluetooth Module

The HC-05 Bluetooth module enables short-range communication between the hygiene monitoring system and a nearby device (such as a smartphone or tablet). It is suited for small-scale deployments or systems that just require local connection, giving a dependable, low-power choice for real-time sensor data transmission.

Different Embodiment of Invention

i. **Wearable Devices:** Monitor personal hygiene indicators such as handwashing frequency.

ii. **Smart Dispensers:** Monitor sanitiser usage and replenish requirements in real time.

iii. **Environmental Sensors:** Monitor air quality, humidity, and surface cleanliness.

iv. **Camera-Based Monitoring** - Analyse hygiene behaviours using video analytics.

v. **Mobile Hygiene Apps** – Offer alarms, reminders, and hygiene score tracking.

vi. **Automated Cleaning Robots** - Clean chores based on forecasted risk zones.

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Application of Invention

a) **Hospital Infection Control** - Hospital infection control detects hygiene breaches to avoid healthcare-associated illnesses (HAIs).

b) **Smart Restrooms** - Monitors cleanliness and usage trends to ensure timely cleansing.

c) **Public Transportation Hygiene** - Monitors surface contamination risk in buses, trains and stations.

d) **School Sanitation Monitoring** - Maintains sanitary conditions in classrooms and common areas.

e) **Food Processing Facilities:** Predicts contamination hazards to ensure safety and compliance.

We Claim

The invention of Predictive Hygiene for Health Monitoring and Risk Reduction Using Machine Learning comprises of:

1) The technology detects hygiene problems in real time utilising live data feeds.
2) Prevents illnesses by predicting contamination before they arise.
3) Data-Driven decision support enables informed hygiene management with ML predictions.
4) Scalable across environments, including hospitals, schools, factories, and public venues.
5) Monitors cleanliness adherence without requiring manual involvement.
6) Connects seamlessly with smart sensors and devices to provide continuous monitoring.

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Abstract

Hygiene is an important aspect in maintaining public health, particularly in areas prone to disease transmission, such as hospitals, schools, and public facilities. Traditional hygiene monitoring systems are frequently manual and reactive, resulting in slow responses and increased health hazards. Predictive hygiene uses machine learning (ML) to provide real-time health monitoring and early danger detection. ML systems like Random Forest and Support Vector Machines can detect hygiene breaches and predict probable contamination incidents by processing data from IoT sensors, environmental factors, and behavioural patterns. This proactive method allows for quick interventions, which improves hygiene compliance and lowers infection rates. The system continuously learns from historical and real-time data to adapt to changing hygiene dynamics, resulting in better decision-making. Predictive hygiene, with its ability to recognise trends and forecast results, enables scalable and effective health risk management. Integrating ML-driven hygiene solutions helps to move public health efforts towards preventive, data-driven approaches in clinical and community settings.

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REQUEST FOR PUBLICATION
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2. To be Signed by the Applicant Or his authorized registered Patent Agent

hereby request for early publication of our application for Patent No.....dated ..... under section 11A(2) of the Act.
Dated this .....day of .....20.

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