**Contactless Thermal sensor Robot Project**

The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems and the world of work. The economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year. Millions of enterprises face an existential threat. Nearly half of the world’s 3.3 billion global workforce are at risk of losing their livelihoods.

So in this extreme pathetic condition it is essential to prevent people from spreading this virus. We are going to deal on this issue.

**Aim of the project:-**  To use all our capabilities and efforts to design a thermal sensor robot.

**Our team :- Our team includes second year students of CSIT department . They are:-**

**Jaydeep Singh Chouhan , Jessica Chouhan , Kanak Joshi , Karan Thakur , Kunal Pratap Singh, Muskan soni , Palak Jaiswal , Pooja Dalai**

**Objectives and Goals** :- The goals and objectives of this project can be split two fold. The first being the objectives where in something of definite value is learned by doing. The goals will chalk out the roadmap for the project which would eventually transcend into something concrete which can be marketed as a concept or as a product.

The Objectives of the project are:

* Establish distributed sensing and control robot.
* Coupling using wired and wireless means.
* Use of IR and RF channel for communication. ·
* Creation of intelligent remote sensor using the mobot as the basis if possible. ·
* Create contactless temperature sensor robot.
* Integration of multiple processors in a given environment.

**Problem Nowadays:-** Now an initial assessment to try to identify people who may be infectious to limit the spread of COVID-19 infections. Temperature measurement can be one part of the assessment to determine if a person has an elevated temperature potentially caused by a COVID-19 infection. One method to measure a person's surface temperature is the use of "no-touch" or non-contact temperature assessment devices, such as thermal imaging or non-contact Thermal sensors. The use of other temperature assessment devices, such as oral thermometers, requires physical contact which may increase the risk of spreading infection.

**Problem solution:-** To ensure that risk of infection do not get increased we need a thermal sensor robot which will not only become an alternative for the human who use to test the temperature but will also reduce the chances of spreading virus to that person.

**Advantages:-**

* Very wide temperature range about -200oC to +2500oC
* Fast response time
* They are a simple construction
* Low initial cost
* Durable
* Easy to read has a clear screen and good scale
* Quick response for any temperature changes
* Precision accuracy in temperature measurement
* It is not easily broken good durability
* Good to be used temperature variation measurement with below 1 cm distance range
* Not required bridge circuit
* Good accuracy
* Does not required bridge circuit
* Good reproducibility
* High-speed response
* They are rugged
* They are a self-power active device

**How it is operated:-**

Contactless temperature sensor will be installed in robot’s hand and a cap is attached on robot’s head whenever the temperature will be high of he person who passes from there a siren sound will get activated automatically and simultaneously it will give Red signal on robots’s cap. If temperature will be normal it will show Green sign on robot’s hat.

**Conclusion:-**

Our whole team will put their hear and soul to make this work happen. We need guidance and support from college faculty members to make it a successful project. Hope you will definitely take efforts to support us.

Thank you