

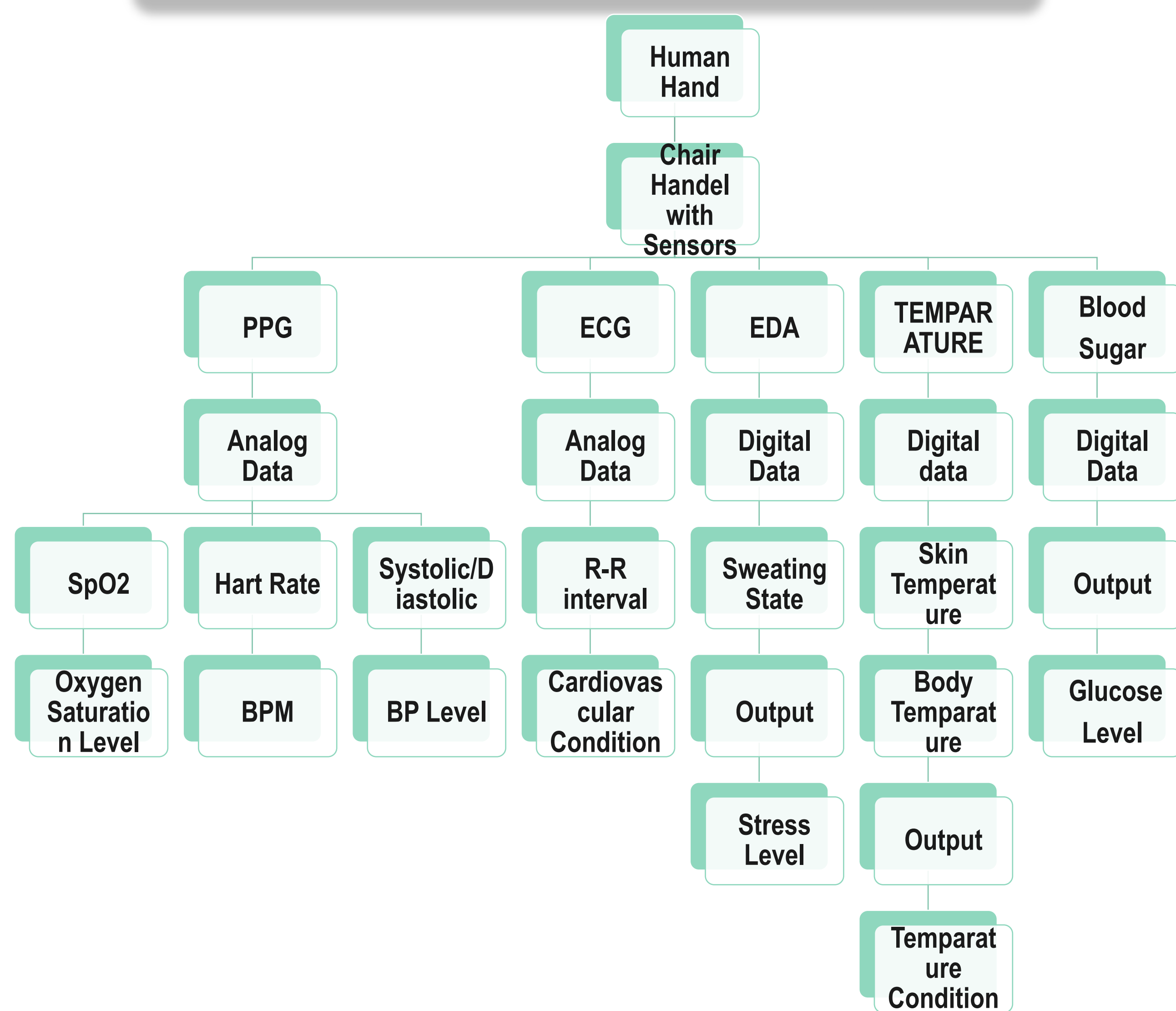
# "PARIGLAN V\_1: Medi-Chair for Non-Invasive Healthcare Monitoring System in Modern Cities "

Presented by: Habib Un Nabi Polash, Snehasish Saha

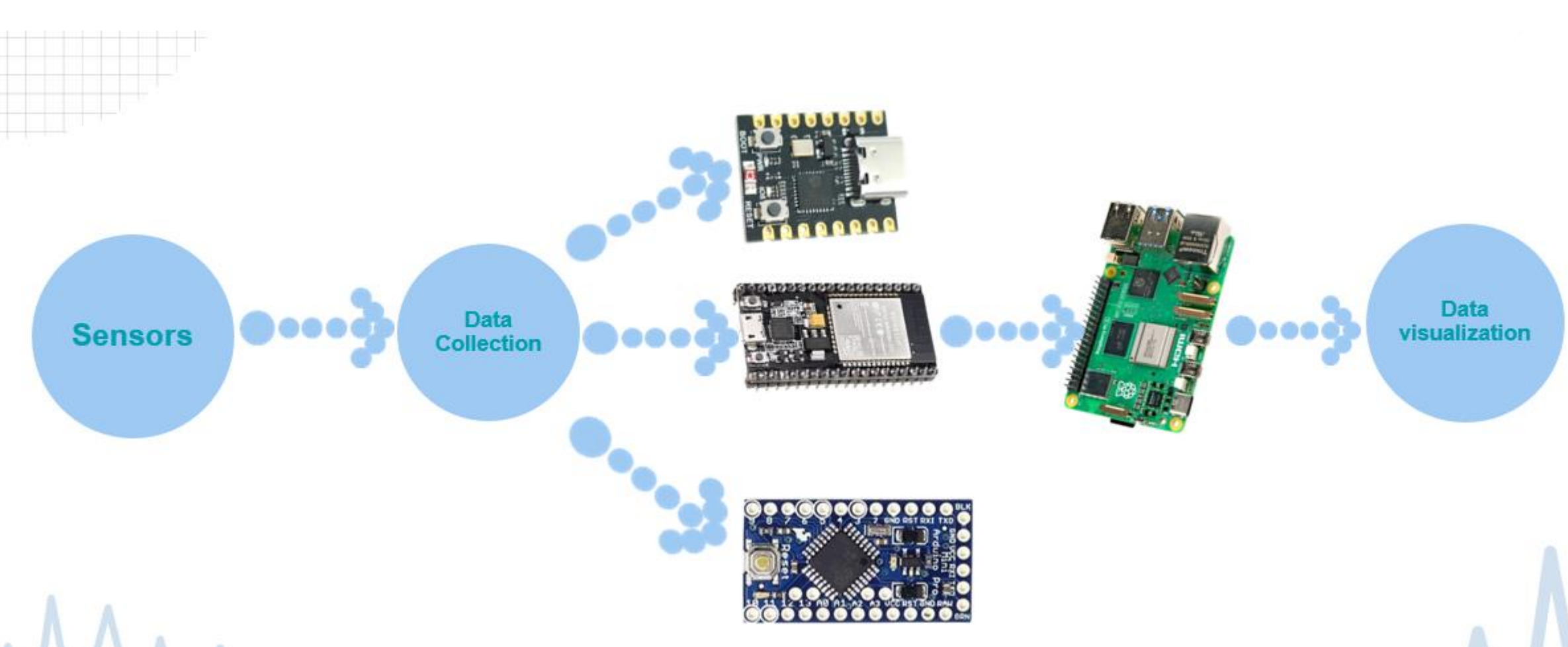
## Objective

In the rapidly evolving landscape of healthcare technology, the Medi Chair stands as a beacon of innovation and efficiency. Designed to revolutionize patient monitoring and care, this state-of-the-art chair integrates multiple vital sign monitoring systems, including ECG, body temperature, heart rate, blood pressure, humidity, and oxygen levels. Moreover, with the inclusion of a copper mesh, it effectively detects pressure points, ensuring optimal comfort and safety for patients.

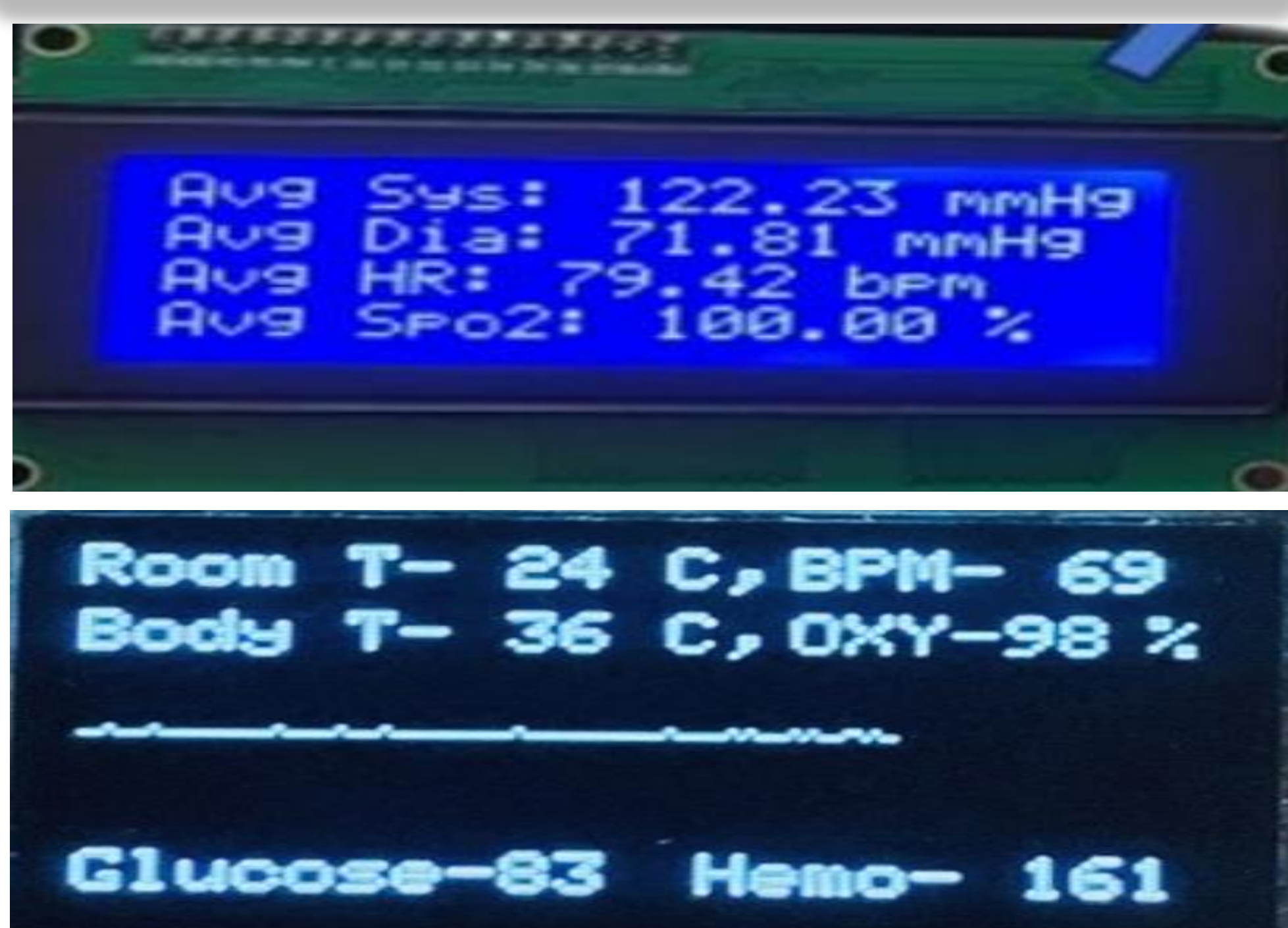
## Methodology



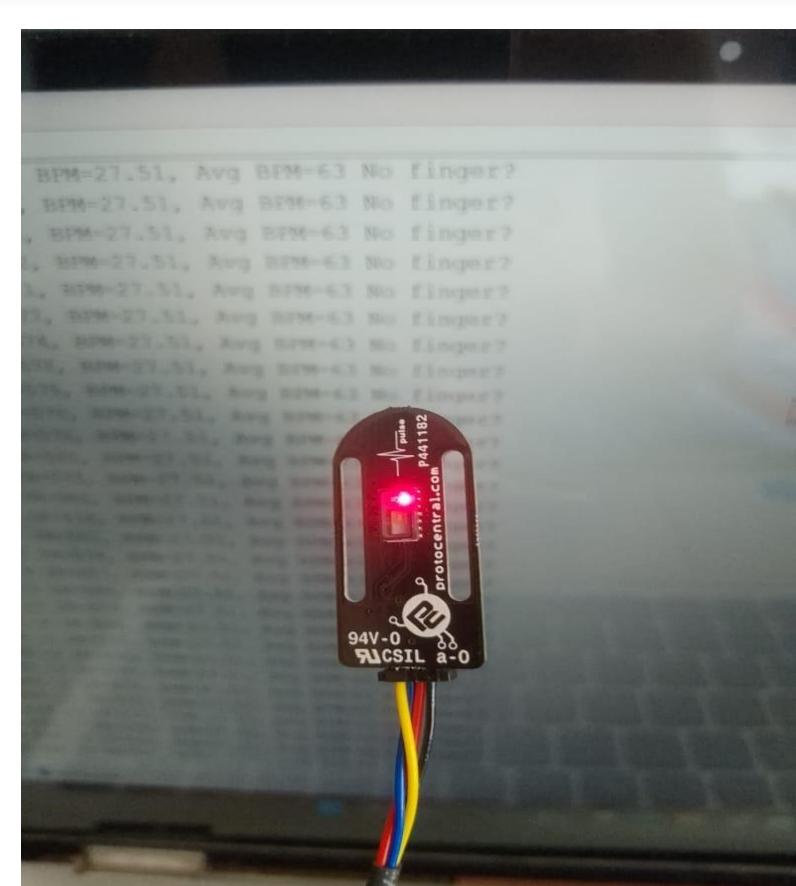
## Data Flow



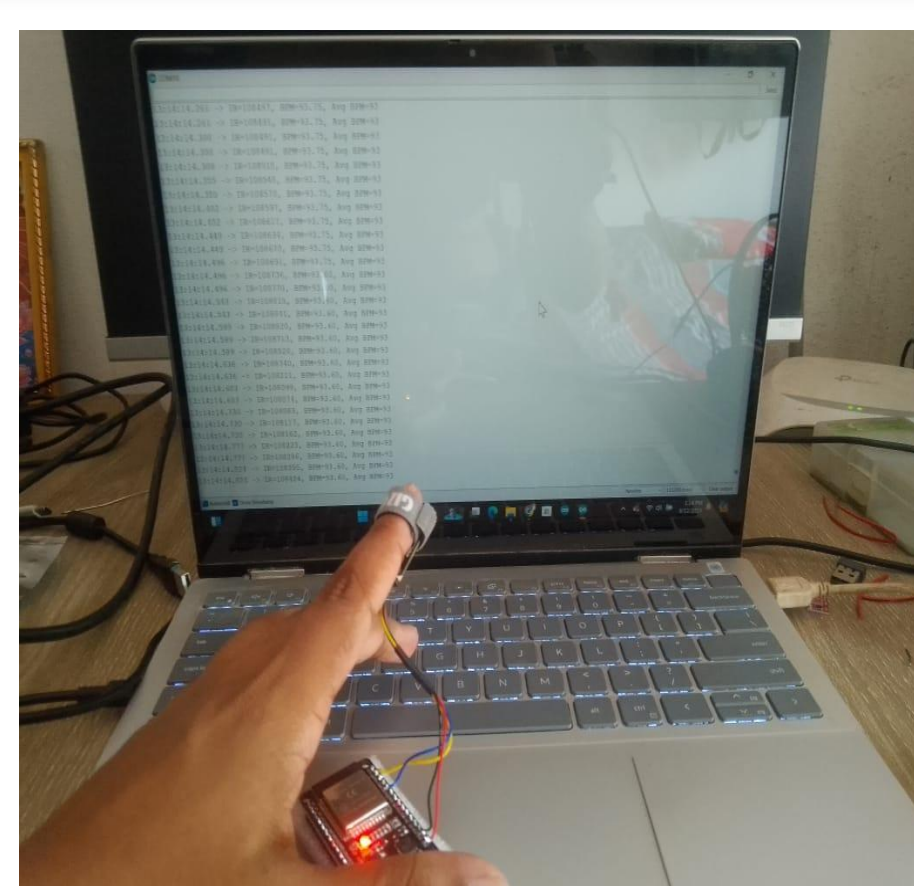
## Sensor Implementation



## Development Process



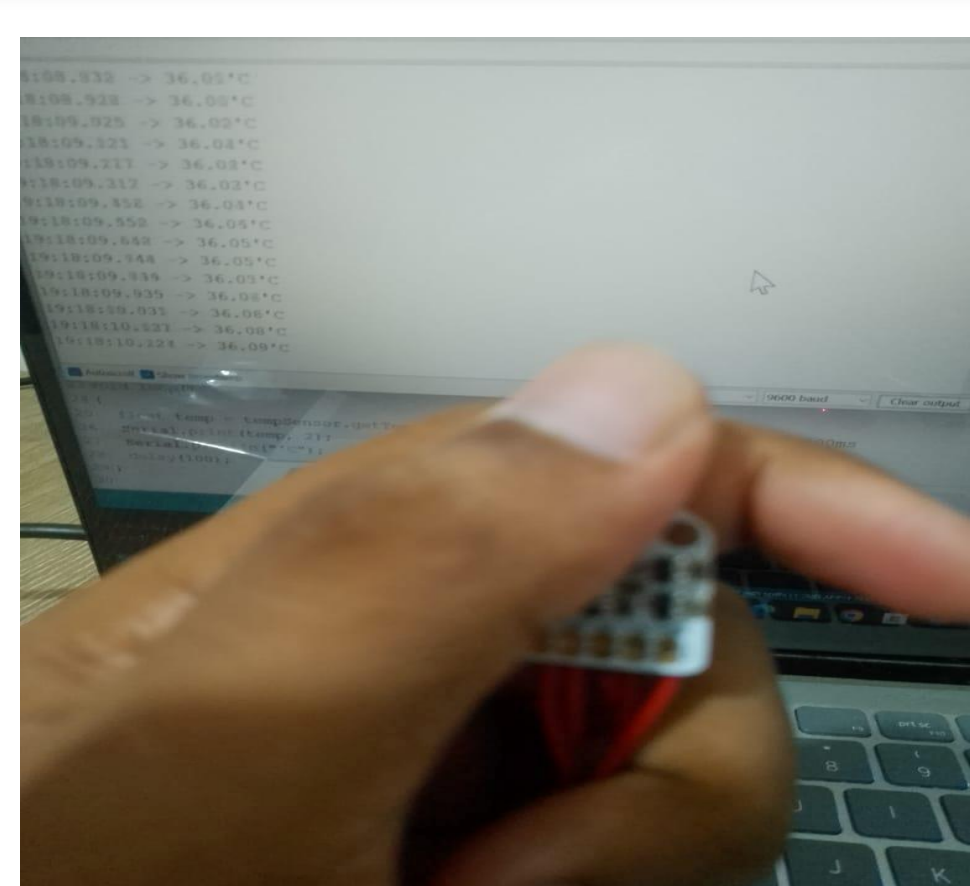
Implement of pulse oximeter sensor



Testing and data collection of pulse oximeter sensor



Implement of Temperature Sensor



Testing and data collection of Temperature sensor

## Goals



## Design Prototype



## Sensor For Medi Chair



Max32664



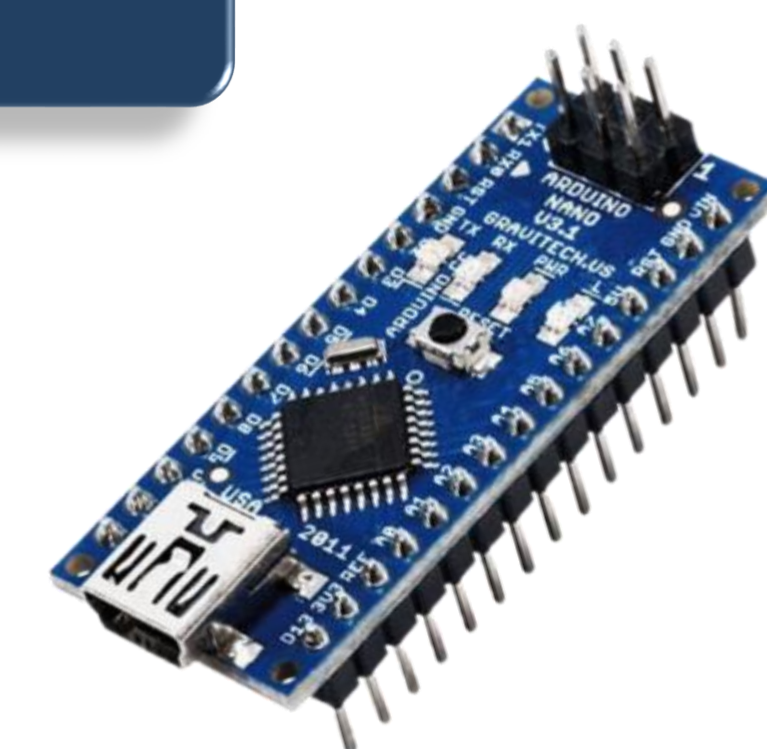
EDA



Max30003



Max30205



Arduino Nano

## Conclusion

The Medi Chair represents a significant leap forward in healthcare technology, combining cutting-edge monitoring capabilities with innovative comfort features. By providing comprehensive vital sign monitoring and advanced pressure point detection, it empowers healthcare providers to deliver superior care while enhancing the overall patient experience. As we continue to embrace innovation in healthcare, the Medi Chair stands as a shining example of the transformative potential of technology in improving patient outcomes and advancing the field of medicine.

## Acknowledgement

We would like to thank our honorable teacher Dr. Shuvra Mondal for his advice and encouragement throughout this poster presentation.

## Achievements

- AIUB CS FEST 2024: Winner at Idea Prototype.
- National Science and Innovation Carnival: 1st Runners Up - Science Based Story Writing

## Reference:

- <https://sequenex.com/how-sensors-are-revolutionizing-healthcare/>
- <https://ijritcc.org/index.php/ijritcc/article/view/7890>
- <https://doi.org/10.9734/jerr/2024/v26i51138>