Literature Review

- **"Low-Cost Health Monitoring System: A Smart Technological Device for Elderly People"**

Shaown, T., & Mollah, M. S. (2021). In Proceedings of Sixth International Congress on Information and Communication Technology (pp. 851–860). Springer.

This paper introduces an IoT-based system designed to monitor the health of elderly people. The authors focus on creating a **low-cost and scalable** solution that helps monitor heart rate, temperature, and other vital signs in real-time. This system can reduce the need for frequent doctor visits and provide instant feedback in emergencies, which is a great step toward improving healthcare for aging populations.

- **"Design, Development and Performance Analysis of a Low-Cost Health-Care Monitoring System"**

Sundararajan, V., & Suresh, S. (2019). IEEE Access, 7, 8745598.

This research focuses on creating an affordable, portable health monitoring device that tracks various metrics, including heart rate. The goal is to offer a **cost-effective** solution for continuous monitoring, especially for chronic disease patients. The system is designed to empower users to monitor their health regularly without the financial burden of traditional medical devices.

- **"IoT-Enabled Low-Cost Fog Computing System with Online Machine Learning for Accurate and Low-Latency Heart Monitoring in Rural Healthcare Settings"**

*Maneshti, H., Dadashi, M., & Rostami, K. (2023). *arXiv preprint arXiv:2302.14131.*

This paper discusses the use of **IoT** and **fog computing** to create a heart rate monitoring system for rural healthcare settings. It highlights how **machine learning** can be used to process heart rate data locally, making the system more **accurate** and **responsive** while reducing reliance on internet connectivity. This approach could be especially useful in areas where connectivity and access to healthcare professionals are limited.

- **"Towards Remote Healthcare Monitoring Using Accessible IoT Technology"**

Sundararajan, V., & Suresh, S. (2020). Biomedical Engineering Online, 19(1), 1-15.

The authors look at how **IoT technology** can be leveraged for remote healthcare monitoring. They emphasize the importance of creating **low-cost solutions** for real-time health data collection, especially in **underdeveloped** and **rural** regions. The paper proposes using **passive sensors** to measure environmental factors that affect health, such as air quality and temperature, in addition to direct health metrics.

- **"Healthcare Monitoring Using Low-Cost Sensors to Supplement and Enhance Traditional Healthcare Systems"**

Sundararajan, V., & Suresh, S. (2023). Sensors, 23(4), 2139.

This review focuses on the use of **low-cost sensors** for continuous health monitoring, discussing the challenges and breakthroughs in making healthcare more **affordable** and **accessible**. The authors emphasize how these sensors can enhance traditional healthcare systems by offering real-time insights, improving patient outcomes, and reducing the need for costly medical interventions.