

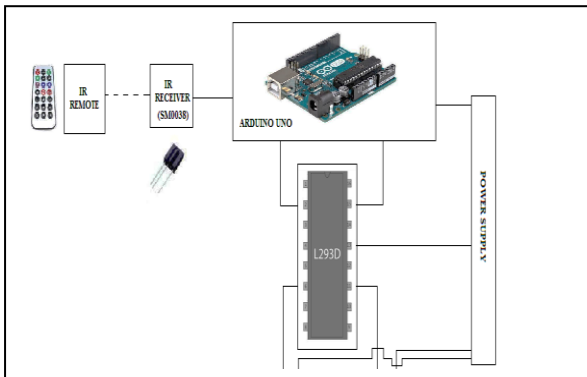


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DEPARTMENT OF BIOMEDICAL ENGINEERING

Development of Cyborg Cot for Decubitus Ulcer screening and Management



Description of the Project:

- Decubitus known as pressure sores which are localized injuries to the skin and underlying tissues that usually occur over a bony prominence, resulting in ischemia, cell death and tissue necrosis, pressure in combination with shear and /or friction.
- It is important to monitor the bed ridden patients to prevent the occurrence of ulcer. The pressures causing ulcers are preventable and they can be cured if they are detected early.
- Development of intelligent cot to distribute the fluid pressure accumulated in prominent locations of the body.
- The intelligent sensor systems screen the severity level of the pressure sores.
- The developed system has various air bags produces prolonged (30mins/cycle) peristaltic motion on the entire body to manage Decubitus ulcer.

Tools Used: PIC Microcontroller, MPLAB, Pneumatic Sensors, Air bags, Pressure, Temperature and Moisture Sensors

Project Guide

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The cot has been designed by the first batch and it was progressed for feedback measurement by the second batch students.

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