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## Automatic Patient Parameters Monitoring and Alerting System

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**Abstract:** This paper presents the conceptual design and prototype development of the Automatic Patient Parameter Monitoring & Alerting System. The APPMAS is designed to enhance patient care through the real-time collection, analysis, and monitoring of vital signs such as heart rate, blood pressure, temperature, and oxygen saturation. The system utilizes sensors and advanced data processing algorithms to detect abnormal patterns or deviations from predefined thresholds. Upon identifying critical changes, the system generates instant alerts to healthcare providers, enabling prompt intervention and reducing the risk of adverse events. This paper discusses the architecture of the system, including sensor integration, data transmission, alert mechanisms, and user interface design. This paper discusses the methodologies, hardware, and software implementations, along with the testing results that validate the prototype's functionality as a proof of concept for the final APMAS system.

Keywords: Real Time Monitoring, Thresholds, Sensor Integration, Internet of Things.

