

**STREMS: A SMART REAL - TIME SOLUTION  
TOWARD ENHANCING EMS PREHOSPITAL QUALITY**

TECHNOFIST

Technofist,

YES Complex, 19/3&4, 2<sup>nd</sup> Floor, Dinnur Main Road, R.T.Nagar, Bangalore-560032

Ph: 080-40969981, Website: [www.technofist.com](http://www.technofist.com). E-mail: [technofist.projects@gmail.com](mailto:technofist.projects@gmail.com)

## ABSTRACT

The paper presents the design and implementation of an IOT-based health monitoring system for emergency medical services which can demonstrate collection, integration, and interoperation of IoT data flexibly which can provide support to emergency medical services like Intensive Care Units(ICU), using a **Blynk** application which normal people can easily install in their phones and get access. The proposed model enables users to improve health related risks and reduce healthcare costs by collecting, recording, analyzing and sharing large data streams in real time and efficiently. The idea of this project came so to reduce the headache of patient to visit to doctor every time he need to check his blood pressure, heart beat rate, temperature etc. With the help of this proposal the time of both patients and doctors are saved and doctors can also help in emergency scenario as much as possible. The proposed outcome of the project is to give proper and efficient medical services to patients by connecting and collecting data information through health status monitors which would include patient's heart rate, blood pressure and ECG and sends an emergency alert to patient's doctor with his current status and full medical information.

## INTRODUCTION

Capturing and sharing of vital data of the network connected devices through secure service layer is what defines IOT. In simple terms, Internet of Things (IOT) can be defined as the wireless network of devices which are connected to each other to share information and data in order to communicate and produce new information so as to record and analyze it for future use. Internet of Things gains its full potential by utilizing the key role playing objects i.e. "Smart" objects which use various sensors and actuators that are able to perceive their context, and via

Technofist,

YES Complex, 19/3&4, 2<sup>nd</sup> Floor, Dinnur Main Road, R.T.Nagar,Bangalore-560032

Ph:080-40969981, Website: [www.technofist.com](http://www.technofist.com). E-mail: [technofist.projects@gmail.com](mailto:technofist.projects@gmail.com)

built in networking capabilities they could communicate to each other, access the open source Internet services and interact with the human world.

This not only makes the world connected but also robust and comfortable. The Internet of things in the field of healthcare also plays a major role in providing ease to patients and doctors. It consists of a system that communicates between network connected systems, apps and devices that can help patients and doctors to monitor, track and record patients' vital data and medical information. Some of the devices include smart meters, wearable health bands, fitness shoes, RFID based smart watches and smart video cameras. Also, apps for smart phones also help in keeping a medical record with real time alert and emergency services.

Technofist,

YES Complex, 19/3&4, 2<sup>nd</sup> Floor, Dinnur Main Road, R.T.Nagar,Bangalore-560032

Ph:080-40969981, Website: [www.technofist.com](http://www.technofist.com). E-mail: [technofist.projects@gmail.com](mailto:technofist.projects@gmail.com)