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| **RESHMA P** | **1GA15CS121** |

**ABSTRACT**

Internet of Things (IoT) is a computing

process, where each physical object is equipped with

sensors, microcontrollers and transceivers for empowering

communication and is built with suitable protocol stacks which

help them interacting with each other and communicating

with the users. In IoT based healthcare, diverse distributed

devices aggregate, analyse and communicate real time medical

information to the cloud, thus making it possible to collect,

store and analyse the large amount of data in several new

forms and activate context based alarms. This novel information

acquisition paradigm allows continuous and ubiquitous medical

information access from any connected device over the Internet.

As each one of the devices used in IoT are limited in battery

power, it is optimal to minimise the power consumption to

enhance the life of the healthcare system. This work explains

the implementation of an IoT based In-hospital healthcare

system using ZigBee mesh protocol. The healthcare system

implementation can periodically monitor the physiological

parameters of the In-hospital patients. Thus, IoT empowered

devices simultaneously enhance the quality of care with regular

monitoring and reduce the cost of care and actively engage in

data collection and analysis of the same.

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Most blockchain users remain susceptible to privacy attacks. Many researchers advocate using anonymous communications networks, such as Tor, to ensure access privacy. We challenge this approach, showing the need for mechanisms through which non-anonymous users can publish and fetch transactions without enabling others to link those transactions to their network addresses or to their other transactions.

A blockchain is a distributed, append-only log of time-stamped records that is cryptographically protected from tampering and revision. In the eight years since blockchains were first proposed, their use as publicly accessible and verifiable ledgers for online financial transactions has become widespread. This rapid adoption has largely been spurred by the success of Bitcoin (https://www.bitcoin.org), a digital currency that—owing to its decentralized and pseudonymous nature, support for complex financial instruments (enabled by a powerful, built-in scripting language), and capacity to facilitate fast and inexpensive transactions across the globe—has proven to be a highly disruptive force in the finance and e-commerce sectors. As Bitcoin and alternatives like Ethereum (https:// www.ethereum.org) and Ripple (https://ripple.com) continue to mature and grow in market value, it is becoming increasingly likely that blockchains as a means to facilitate financial transactions are here to stay. Yet blockchains represent far more than a mere monetary innovation; researchers and industry members alike are only just beginning to understand the true potential of blockchain-based distributed ledgers, with their strong integrity and availability guarantees and their ability to leverage community consensus to eschew centralized trusted curation. Indeed, beyond the sorts of payment transactions for which blockchains are already widely deployed, potential applications for blockchains abound in areas as diverse as electronic voting, certificate authorities, the Internet of Things, and smart systems. Moreover, the past few years were marked by announcements from numerous companies—ranging from startups like R3 (https://www.r3.com) to established technology firms like IBM and financial institutions like Visa—about forthcoming products based on innovative blockchain designs that are specially tailored to meet organizational and business logic needs. The target applications for these products range from payment settlement through supply-chain management and beyond.

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