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(57) Abstract :
In medical diagnosis and therapy, the Internet of Things and Machine Learning techniques are routinely used to monitor a patient's status. IoT has been utilized to build systems that warn the patient's peers in the case of an anomaly by utilizing the capabilities of a wearable sensor system with sensors installed on it. Machine learning-RNN has been used to help in medical diagnostics by using models that have been trained to detect any anomalies in the patient's condition. A pulse oximeter and a temperature sensor are used to monitor the health of patients in this framework. Cloud IoT is used to evaluate, categorize, and exchange medical data between consumers and healthcare professionals, and IoT sensors are utilized to collect the necessary data. The data will be stored in the cloud IoT with a z-wave device collecting data from various sensors used in patient monitoring, and it will be transferred to the hospital and stored in the hospital database using AI&ML based techniques to analyze the data in real time, such as the Fuzzy Rough C-means Clustering based classification approach used to categorize users into infected or uninfected classes. We use Fuzzy Rough C-means Clustering to divide the user into infected and uninfected groups, using the similarity coefficient to discriminate depending on the patient's symptoms. If any errors occur, patients can receive tailored therapy utilizing wearable devices like fitness bands and other wirelessly connected equipment like blood pressure and heart rate monitoring cuffs, glucometers, and other devices. Calorie counts, exercise, appointments, blood pressure changes, and several other things can be set up on these devices. People's lives have been revolutionized by the Internet of Things, notably the lives of elderly patients, who can now track their health in real-time. The impact on single parents and their families is significant. An alarm mechanism delivers messages to family members, doctors, paramedics, and other concerned health providers if a person's regular habits are disturbed or altered.

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