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(57) Abstract :

IoT is widely used in a variety of applications. In the healthcare system, the Internet of Things (IoT) plays a critical role in connecting doctors and patients using health monitoring devices. This is very cost-effective and beneficial for the elderly and disabled. There are various methods for monitoring the well-being of the elderly, and in this method, we compare various data mining methods that are used from data obtained from smart metres, appliance usage, and video surveillance, as well as their prediction accuracy. Wearable sensor-based human physical activity recognition. This is further extended to an IoT platform, which is based on a web-based application that integrates wearable sensors, smartphones, and activity recognition. To accomplish this, a smartphone collects data from wearable sensors and sends it to a server for processing and activity recognition. We gathered a unique data set of indoor and outdoor physical activities. The participants are of both genders, and the number of participants per activity varies. During these activities, the wearable sensors use accelerometers, gyroscopes, magnetometers, pressure, and temperature to measure various body parameters. These statistics and measurements are then represented in features vectors, which are used to train and test supervised machine learning algorithms (classifiers) for activity recognition. Using the WEKA machine learning suite, we evaluate several well-known classifiers such as random forests, support vector machines, and many others on the given data set and FHE has demonstrated the ability to run a computation without performing data decryption in a secure manner. Many authors have demonstrated the practical implementation of Somewhat Homomorphic Encryption (SHE) or Fully Homomorphic Encryption (FHE), schemes on both the addition and multiplication operations for SHE. To increase the computation power required by SHE methods, recent methods for implementing FHE methods completely rely on arbitrarily reducing the time taken to perform the encrypted multiplication operation.

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