ASSIGNMENT – 1

-CB.SC.U4CSE23246

Edge computing is recently providing help in transforming healthcare sector by providing new inventions. But certain challenges are bringing hardship for working of these technologies mainly in the field of cyber security.

In the existing resource scheduling research, security and privacy issues have not been clearly monitored. It has high chances of getting attacked that may affect reliability. This makes the total time and resources put into it wasted. Therefore, required efforts are needed to be put into the researches related to edge systems in resource scheduling. Specifically, system robustness enhancement mechanism and intrusion detection strategy need to be developed. If we take care this matter the healthcare department can get many benefits that helps in provide better treatments.

Latency and accuracy are 2 important factor to look into if we are working on something related to real-world application, most importantly if it is Healthcare. We can't take a chance in matter related to life. Having delay in providing service is life threatening. We should have methods that will help reduce these delays. For delay sensitive applications, designing a resource scheduling algorithm to reduce latency is helpful. Since the computing, communication, and storage resources in the edge system are limited multiple delay-sensitive tasks are sent at the same time which will bring energy usage and resource availability issues. Recent researches are focusing on developing a delay model for each task. They consider the challenges and different situations where focus is needed. New methods and algorithms designed can be helpful to reduce latency.

 Accuracy is another factor that is in need of monitoring. QoE and QoS are very important. We should focus on correctness of the work. Data interpretation and analysis should be properly done. The algorithms and methods used to given precise data. If there is a anything wrong in the information the life of patient will be stake. Taking data from sensors and other things like image processing everything is important for proper treatment. These data collected should be correct and need to be properly recorded. Both latency and accuracy should be optimized for proper management.

Edge computing is used in health care sector since huge amount of data is daily being processed. Edge can be used to process large data instead of them being transferred to clouds and other storage areas. Advantage of this is that response time and cost for communication is reduced. Different models like EoT and AZSPM increases efficiency and provide security respectively.

Edge methods provide reliability, cost effectiveness, latency, accuracy etc that makes it very useful in hospitals and medical fields. If we see total processing of edge provides many advantages. Proper monitoring and use of required algorithms in its working will make makes this the best in industry. Providing services in healthcare field will help in giving better data analysis and proper treatment to patients.