

## **Blockchain Technology for Web 3.0**

### **Abstract:**

Many of us know that blockchain is a technology behind the bitcoin, bitcoin uses the blockchain to track the transactions, but Block chain has many more use cases. To understand how, one need to understand what is Blockchain? So, to Answer it with, Blockchain is a decentralized blocks of data that are connected to one another forming a distributed network. Every block has a data, its own fingerprint called hash [unique across the network] and the hash of its next node. the data stored on the blocks are immutable or cannot be tampered and trying to tamper a data on block can lead to an invalid block as data change leads to hash value change making it invalid from the linking node. The blocks that store the data allows us to use the Blockchain technology in healthcare to store the patient's record, or to storing user public and private documents like marks cards, or one can store documents related to the assets they own and many more. But the decentralized nature of Blockchain Technology revolutionizes the internet by giving birth to Web 3.0. As we are in the era of Web 2.0 where the user data is owned by companies like Facebook, Amazon, Google, YouTube, and some of the AI based tech giants. They have complete control over the user data, with the Web 3.0, users are the owner of their data and have all the right to control it. As we go along this term paper, we will discuss the use cases, advantages and disadvantages involved with Web 3.0.