## Web 3.0 view of IoT

Web 3.0 describes the next evolution of the World Wide Web, the user interface that provides access to documents, applications and multimedia on the internet. Web 3.0 will place a strong emphasis on decentralized applications and probably make extensive use of block chain-based technologies. It also uses machine learning and AI to empower a more intelligent and adaptive web.

web3 in IoT is a network that runs an application on decentralized, community-powered networks and aims to give back ownership to its users. Web 3.0 aims at democratization of the internet by allowing users to regain control of their personal data. At the same time, IoT aims to connect almost everything around us to the internet, thereby dissolving the barrier between physical and virtual worlds.

## Web 3.0 Machine Centric Web

- Services that emphasize a machine facilitated understanding of information on the web
- Semantic Web-Publishing in languages specified for data
- ✓ Resource Description Framework(RDF)
- ✓ Web Ontology Language(WOL)
- ✓ Extensible Markup Language (XML)
- Development of web 3.0 focuses on adding metadata or information to describe the content of web
- ✓ Provide an intelligent level to the website
- $\checkmark$  Enable the user to communicate completely with the machine
- $\checkmark$  Enables machines to communicate with each other

## Pillars of Web 3.0

- Tagging
  - Adding meta data to index and describe resource
  - Web 3.0 allows not only text search, but also images, audio and video

- Sub-search engine pull feeds automatically for you
- High level of personalized vocabularies and structure
- Micro formats
  - Define semantic vocabularies by user
  - Variety of options: RDF, XML, XFN
  - Bridge the gap between understandings by human and machine



