Week 6 Progress Report on Internet of Things

Upskill Campus,UniConverge Technologies Pvt.Ltd

Submitted by:Palla Susmitha

Correspondence Address:

Palla Susmitha

Madanapalle Institute of Technology and Science,

Department of Computer Science and Engineering,

Angallu,Andhra Pradesh,517325,India.

Mail:pallasusmitha233@gmail.com

OverView:

In the internship program, I have learnt about the IOT – introduction – architecture - and its applications. IOT challenges, cloud computing. Embedded and IOT. The circuit design, success ladder to the corporate world.

IOT-DEPLOYEMENT-AND-CHALLENGES:

IoT deployment is expanding out from consumer-based applications such as [smart home devices](https://itchronicles.com/iot/the-connected-home-how-secure-are-your-gadgets/) and wearables to applications in the areas of public safety, emergency response, industrial automation, autonomous vehicles, and the Internet of Medical Things (IoMT). Many of these are mission-critical processes with life or death implications — so it’s essential to get it right.

Role of Cloud Computing in IoT:

Cloud computing helps in storing and analyzing this data to provide the maximum benefits of an IoT infrastructure. To create high visibility, IoT solutions should connect and allow communication between things, people, and processes, and cloud computing.

**• Scalability**

Positioning cloud services into the IoT system is highly scalable. This scalability safeguards network infrastructures thereby cutting off extra charges required for purchasing hardware. It even saves overall time invested hence enhancing accuracy. Moreover, IoT cloud computing offers flexibility for scaling down the number of IoT-enabled devices.

• **Data Mobility**

The data stored and processed in the cloud server is very easily accessible. Moreover, it can be assessed from almost everywhere & anywhere globally. Cloud computing is boundless of any infrastructural or network limitations. IoT projects demand mobility, real-time monitoring & effective management of connected devices; which are all offered by Cloud Computing.

• **Security**

Security is one of the major issues which an IoT system faces since its development. Thankfully, this issue can be solved by embedding cloud platforms into IoT infrastructure. Until its on-premise servers, the security charges lie solely in the hands of the organization. This leads to major security issues experienced on behalf of some organizations. Even though, the clients & cloud service providers agree on a common understanding.

**• Cost-Effectiveness**

Cloud computing reduces up-front costs to a significant level. Users find its 'pay per use' policy very effective. Cost-effectiveness can be considered as one of the best features attracting many IoT-based businesses to switch to the cloud.

CHALLENGES I ENCOUNTERED:

It takes time to understand,but later when I studied the concepts twice,I came to know detail.