

A Report on

Webinar On

“Connecting the Physical World on Leveraging IOT for Real-Time Data”

03 December 2022



Submitted by **Mr.Y.Ravi Raju**, Assistant Professor, Department of CST.

Resource Person details:

Resource Person: **Dr.D.Udaya Suriya Rajkumar**

Designation: **Professor**

Department: **CSE**

Organization: **Global Institute of Engineering & Technology**

Participants: **III year CST students**

Attendance: **83 participants (Internal)**

Venue: **Seminar Hall – A, MITS, AP**

Mode: **Online**

Department of Computer Science and Technology has organized Webinar on "Connecting the Physical World on Leveraging IOT for Real-Time Data" on **03-12-2022 (Saturday), 10:00 am**.



Objective:The aim of this Webinar is that students has to learn By leveraging real-time data from IoT devices, to understand the rapid growth of Internet of Things (IoT) devices and the increasing demand for real-time data analytics

Topics for the session

- Introduction to IOT
- Real-Time Data Analytics
- Leveraging Cloud Computing for Real-Time Data Analytics
- Applications

Inauguration: The inaugural session started at 10:10 AM on Microsoft Teams. Event Coordinator, Mr. Y.Ravi Raju, Assistant Professor, CST gave the Welcome Address, briefed about this event, followed by enlighten motivation to students by Dr. M.Sreedevi ,HoD-CST and handed over the session to the Resource Person, Dr.D.Udaya Suriya Rajkumar, Professor, Global Institute of Engineering & Technology,Tamilnadu

Chief Guest Lecture: Dr.D.Udaya Suriya Rajkumar insights about the importance of IOT, mainly focusing on the impact of IOT The Internet of Things (IoT) has a profound impact on various aspects of our lives, industries, and society as a whole. Here are some of the key impacts of IoT on real time data like s influencing the generation, collection, and utilization of real-time data continuous data generation, predictive analytics,Improved operational efficiency, Data fusion and integration etc.

the impact of IoT on real-time data analytics is transformative, enabling organizations to unlock new insights, optimize operations, and deliver innovative services in real-time. As IoT adoption continues to grow, the role of real-time data analytics will become increasingly critical in driving business success and innovation.

Leveraging IoT (Internet of Things) for real-time data is a powerful way to connect the physical world and gather valuable insights. Here's a breakdown of how this process works and some key considerations and It mainly deals with

Connectivity: IoT devices require connectivity to transmit data. This can be achieved through various means such as Wi-Fi, Bluetooth, cellular networks, LPWAN (Low Power Wide Area Network), or even satellite communication depending on the specific use case and requirements.

Data Transmission: Once data is collected by IoT devices, it is transmitted to a central system or cloud platform for processing. This transmission can be done in real-time or periodically depending on the application.

Data Processing analysis: In the central system or cloud platform, the collected data is processed and analyzed in real-time. This may involve filtering, aggregating, and analyzing the data to extract meaningful insights.

Security and Privacy: With the proliferation of IoT devices, ensuring security and privacy of data becomes crucial. This involves implementing robust authentication, encryption, and access control mechanisms to protect sensitive information.

Applications:

Leveraging IoT for real-time data applications opens up numerous possibilities across various industries. Here are some examples of how IoT can be utilized for real-time data applications mainly impacts on Smart Manufacturing, Agriculture, Production, Healthcare ,Retail etc

These are just a few examples of how IoT can be leveraged for real-time data applications. As IoT technology continues to evolve, the potential for real-time data analytics across various industries will only continue to expand, driving innovation and transforming the way we live, work, and interact with the world around us. So we can apply these on many real time applications

Outcome:

Students gained the knowledge on IOT concepts and Data Analytics.

Students enriched their knowledge in greater agility and responsiveness by identifying the real impact of IOT on various data analytical applications.

Students able to understand “How to this is important and how this concept will be implemented like projects and to prepare some prototypes

Vote of Thanks: Mr.Y.Ravi Raju., Assistant Professor, proposed a vote of thanks. He thanked the event's Chief Guest, Dr.D.Udaya Suriya Rajkumar,for delivering the talk. He expressed gratitude to the students, HOD, Principal, and the Management for their support in conducting the guest lecture. He extended his thanks to all the supporting faculties.