



# **SNS COLLEGE OF ENGINEERING**



**Kurumbapalayam(Po), Coimbatore – 641 107**

**Accredited by NAAC-UGC with 'A' Grade**

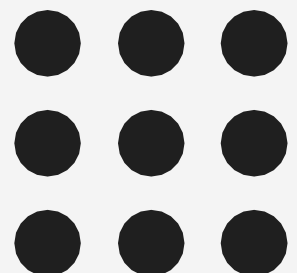
**Approved by AICTE, Recognized by UGC & Affiliated to Anna University, Chennai**

## **Department of Information Technology**

**Course Name – Internet of Things**

**III Year / V Semester**

**Unit 5- AI IN INTERNET OF THINGS**





# The role of Artificial Intelligence in IOT

# What is Artificial Intelligence?

**Artificial Intelligence** is the technology with the help of which machines can perceive, learn, solve complicated problems and make analysis just like humans. The machines exhibit traits similar to that of humans. 3 main steps constitute the whole functioning of AI- For example- self-driving cars can decide which direction to take, the speed, etc.





## What is the Internet of Things(IoT)?

The short form of the internet of things came into existence when in 1999, **Kevin Ashton** mentioned it in his presentation of Procter and Gamble.

IoT refers to the wide assemblage of physical devices connected to the internet via a wireless network to collect and share data. Here are some of the examples of IoT – air conditioners, smartwatches, and smart cars.

A survey conducted by **Business Insider** gave jaw-dropping insights that by 2027 the number of IoT devices would reach to be 41 billion as compared to 9 billion in 2009.

**W** **R** **I** **T** **E** **S**



# AI and IOT ?

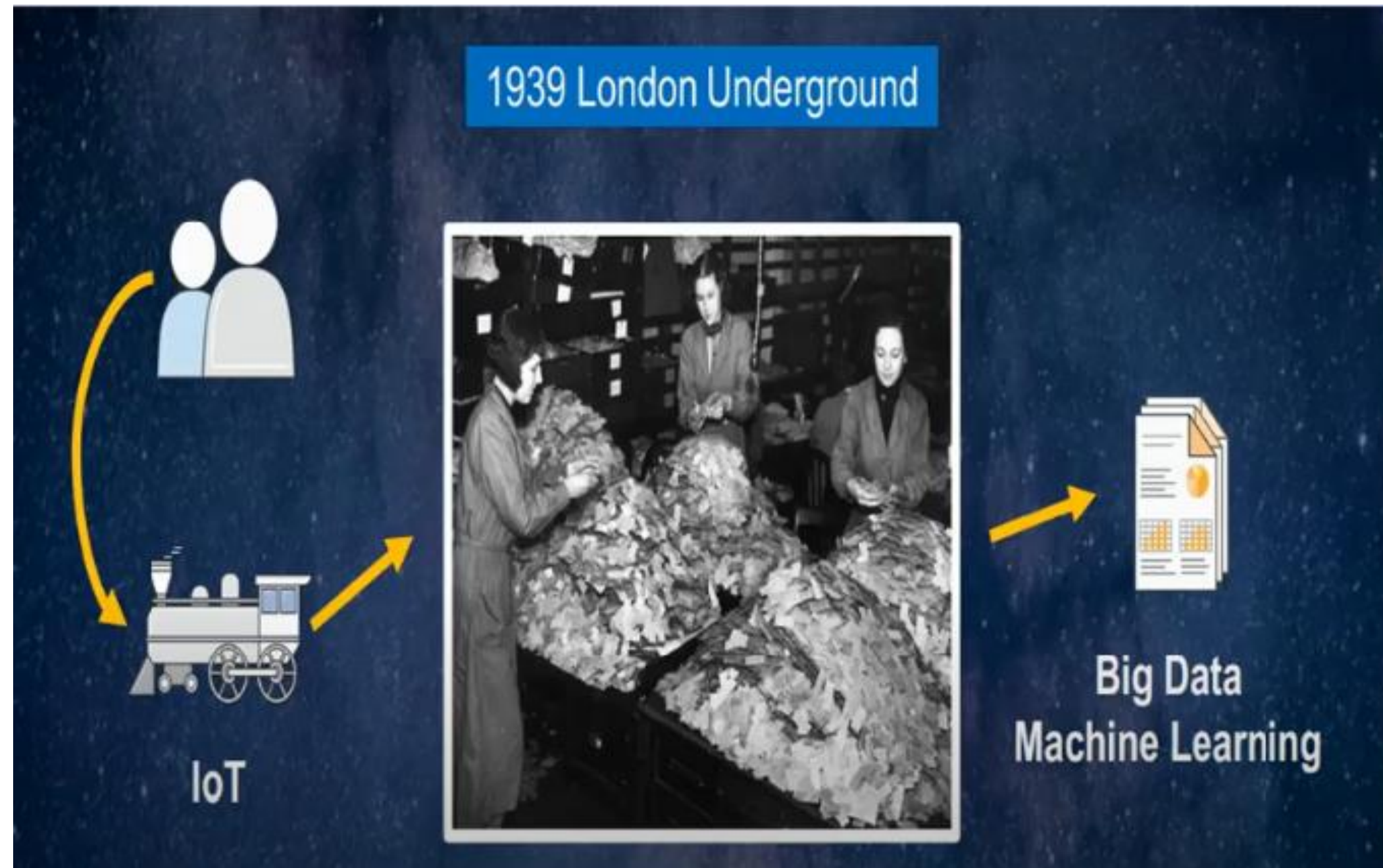
- ▶ Artificial Intelligence (**AI**) and the Internet of Things (**IoT**) are the next level technologies.
- ▶ AI makes the **machine learn** from its experiences and manage with new data.
- ▶ AI is not a new technology but due to heavy use of **big data**, it is gaining popularity again. Similarly, IoT is the combination of more than **one devices or sensors together** over the internet.



### **Artificial intelligence and IoT helps to achieve the following:-**

- Obtaining relevant and meaningful insights from the data by analyzing it.
- This union ensures accurate forecasts.
- Confidentiality of data is maintained.
- Personalization becomes easy.
- Ensures utmost security against cyber attacks.





## ► Collaboration of IOT and AI





## Amazon Greengrass: Example Use Cases



Smart Homes



Agriculture



Manufacturing

## Amazon Greengrass: Example Use Cases



Smart Homes



Agriculture



Manufacturing