BHILAI INSTITUTE OF TECHNOLOGY RAIPUR
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

Trek The Tech

Introduction to the technology

Internet of Things (IoT) is among the latest innovations in the area of Computer Science & Engineering and IT. This specialization covers the development of IoT products and services along with the devices for sensing, actuating, processing and inter communication. The main application of IoT in various sectors like Industry, Energy, Retail, Healthcare, Automation, Robotic Things, Green infrastructure and the like.

The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction."

An internet connection is a wonderful thing, it give us all sorts of benefits that just weren't possible before. If you're old enough, think of your cell phone before it was a smartphone. You could call and you could text, sure, but now you can read any book, watch any movie, or listen to any song all in the palm of your hand.

IoT and lifestyle

From refrigerators that order groceries, security sensors, app-controlled lighting and air-conditioning and home entertainment hubs; the Internet of Things (IoT) is opening new up new frontiers of convenience and lifestyle choices.

Major companies, like Amazon, Google, and Tesla, are already working with software development services to produce cutting-edge IoT devices that can utilize the ultra-fast speeds offered through 5G wireless, expected to be widely available within the next five year

Top 10 Applications of IoT :

1. Smart Homes

2. Smart City

3. Self - Driven Cars

4. IoT Retail Shops

5. Farming

6. Wearables

7. Smart Gadgets

8. Industrial Internet

9. Telehealth

10. Smart Supply Chain Management

Scope of IoT :

As you know, IoT is evolving and is being experimented with and used in tons of different ways than you can ever imagine. Some IoT examples can be Smart Breweries, Smart Coffee Machines, Smart Parking Facilities, Smart Supply-chain Mechanisms, and more.

It is estimated that by 2020 there will be more than 20 billion connected IoT devices over the internet. IoT devices will be a huge part of how we interact with basic everyday objects. To accomplish this there will be need of IoT Specialists for IoT based solutions.

The list of job profiles for a Graduate in CSE with specialization in IoT includes the profile of IoT Engineer, IoT App Developer, IoT Solution Architect, IoT Devices System Administrator and IoT Scientist to name a few.

The Graduates can also opt to become an entrepreneur in the area of development of Electronic Gadgets / Solutions, based on IoT applications.

The future of IoT has the potential to be limitless. Advances to the industrial internet will be accelerated through increased network agility, integrated artificial intelligence (AI) and the capacity to deploy, automate, orchestrate and secure diverse use cases at hyperscale.