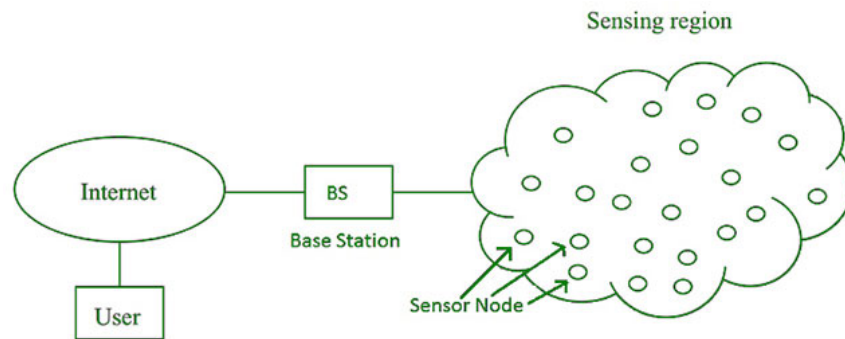


Learn about Wireless Sensor Network (WSN)

Wireless Sensor Network (WSN) is an infrastructure-free wireless network that is deployed with a large number of wireless sensors in a special way that is used to monitor the system, physical condition or the environment.

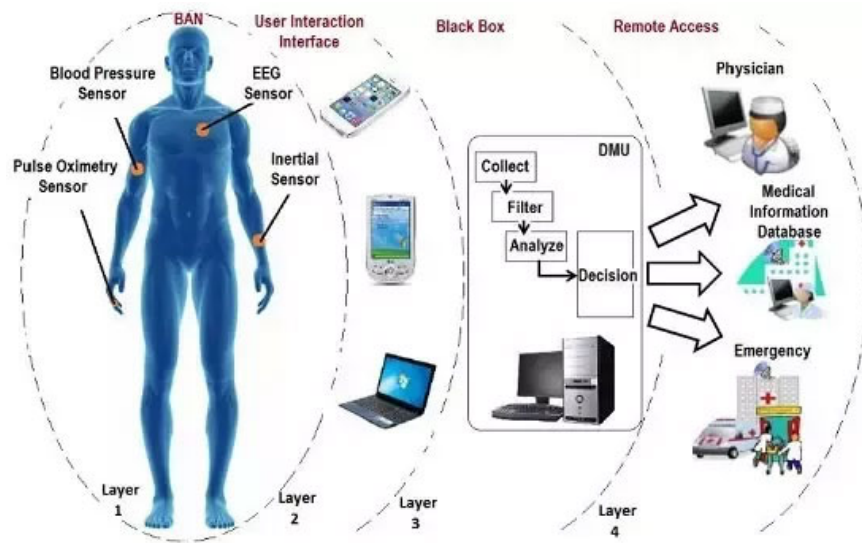
Sensor nodes are used in WSNs with integrated processors to manage and monitor the environment in a specific area. They are connected to the Base Station that acts as a processing unit in the WSN system.

The base station in a WSN system is connected over the Internet to share data. WSN can be used to process, analyze, store, and exploit data.



WSN applications

1. Internet of Things (IOT)
2. Monitoring for security purposes, to detect threats
3. Monitor the ambient temperature, humidity and air pressure
4. Measure the noise level of the surrounding environment
5. Used in medical applications to monitor patients
6. Agriculture
7. Find landslides



Challenges of WSN

1. Quality of Service
2. Security issue
3. Energy efficiency
4. Network throughput
5. Efficiency
6. Ability to deal with node errors
7. Cross layer optimisation
8. Scalability to large-scale deployment

Components of WSN

1. Sensor

Sensors in WSN are used to capture environment variables and used to collect data. The sensor signal is converted to electrical signal.

2. Radio node

Radio nodes are used to receive data generated by the sensor and send that data to the WLAN access point. It includes a microcontroller, transceiver, external memory and power supply.

3. WLAN access point

The WLAN access point receives data sent by wireless radio nodes, usually over the Internet.

4. Software evaluation

The data received by the WLAN access point is processed by a software called evaluation software to present the report to the user, for the purpose of further data processing (analysis, storage, etc.). and mining).

You finished reading the article "**Learn about Wireless Sensor Network (WSN)**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.
