



ADVANTAGES OF SENSOR NETWORKS

- Networked sensing offers unique advantages over traditional centralized approaches.
- Dense networks of distributed communicating sensors can improve signal-to-noise ratio (SNR) by reducing average distances from sensor to source of signal, or target.
- Increased energy efficiency in communications is enabled by the multihop topology of the network
- the greatest advantages of networked sensing are in improved robustness and scalability.
- A decentralized sensing system is inherently more robust against individual sensor node or link failures, because of redundancy in the network

APPLICATIONS

- **Military applications:** Sensor nodes can be spread across a battlefield or enemy area and be programmed to track and monitor enemy troop movements or movement of terrorists and can be used to locate their exact positions.

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- **Environmental applications:** Sensor networks are being increasingly used for environmental concerns. Examples include tracking the nesting habits of seabirds by monitoring a large geographic region with human presence, or attaching the sensors directly to large mammals to monitor their behavior.

APPLICATIONS

- **Medical applications:** WSNs can be used in medical applications by using the sensor node as a device that can reside on or within the human body and perform tasks that are currently done by costly machines

APPLICATIONS

- **Industrial applications:** For use in industrial applications, low-cost sensor nodes could be attached to equipment to monitor performance
- **Urban applications:** WSNs can be used for various urban applications like transportation and traffic systems, auto-identification by driving license, parking availability, security monitors in shopping malls, parking garages, city streets and home security

home security