Emerging technologies

Old tech that is now being used more

Basically advancing technology

Numerous tech are advancing at an unimaginable rate

Eg:

Intelligent sensors and wireless sensor networks

* Medical instrumentation
* Factory & Office automation
* Automotive & transport
* Telecommunications
* Structural Fatigue monitoring

Intelligent cars and smart highways

* Safety critical systems (ABS)
* Electronic Stability control
* Rollover prevention
* Autonomous Predictive Cruise Control
* Intelligent Speed adaptation

Telehealth (wireless health)

* Wearable sensors (for monitoring vital signs)
* Wireless interface for data transfer to PC cellphone, doctors office with real time interaction
* Kiosks with real time capability to monitor vital body signs
* Provide real time vital body signs of information to coaches

Microelectromechanical systems (MEMS)

* A machine so small that it is imperceptible to the human eye
* Eg microprocessors
* Creates integrates electromechanical systems that merge computing with sensing and actuation
* Mechanical components have dimensions in microns and numbers in millions
* Uses materials and processes of semiconductor electronics

Nanotech

* NNI defines the nano tech as consisting of all of the folowirn
* Research and tech development ta the 1 to 100 mm range
* Creating and using structures that have novel properties
* Ability to manipulate objects at the atomic level

Cleantech

* Tech that is clean like solar , wind, powercells etc

Robotics and automations

* Typical appli