

iSpace Concept

Intelligent Space (iSpace) is a concept to effectively use distributed sensors, actuators, robots, computing processors, and information technology over a physically and/or virtually connected space. E.g. a room, a corridor, a hospital, an office, or a planet. iSpace fuses global information within the space of interest to make intelligent operation decision such as robot navigation, remote surgery etc.

Advantages:

1. Not limited by the physical space. (Tele-operation, Tele-presence)
2. Fuse global information for global optimal solutions.
3. Scalability - Easy to add sensors and actuators with little incremental cost and without heavy structural changes.

Applications:

1. Manufacturing plant monitoring
2. Nursing homes or hospitals
3. Tele-robotics & Tele-Medicare etc

