ITC 12

REAL TIME SYSTEMS

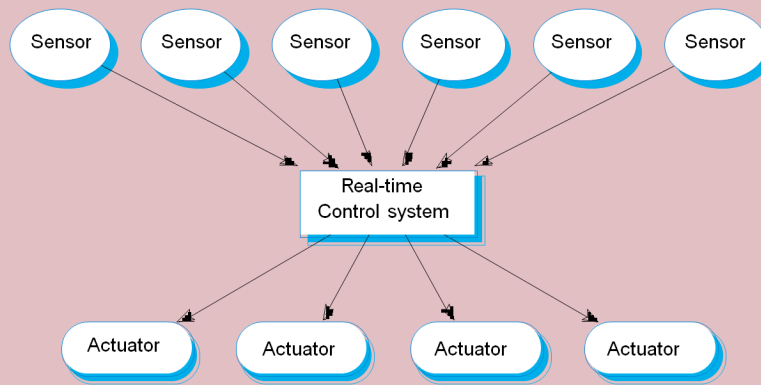The 2nd Information Technology Colloquium 2012

Real time systems play fundamental part in our lives. They are developed for commercial, industrial and military use.

When a computer processes data in real time, it reads and handles data as it is received, producing results without delay.
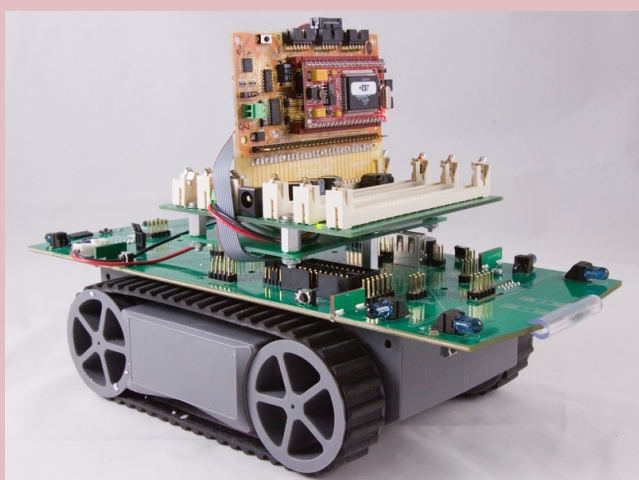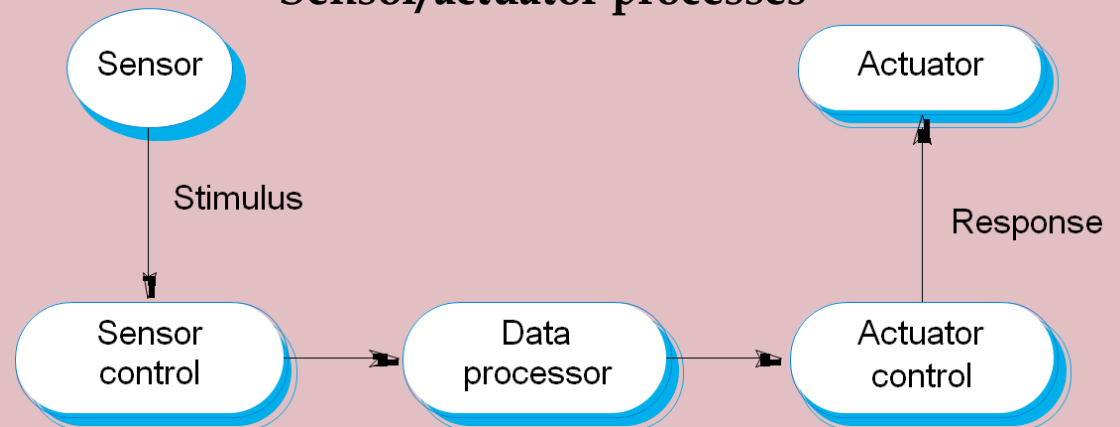
A real-time system model

Real Time software can operate on a standard workstation or in an embedded computer.

The Boeing 777 contains hundreds of CPUs. A typical modern car has more than 40 CPUs. Each modern medical device contains software .

Sensor/actuator processes

Sensor — Stimulus → Sensor control → Data processor → Actuator control — Response → Actuator

Many video games also function in real time.

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