Fuzzy Logic Applicability

The employment of Fuzzy Control is appropriate:

- for very complex processes, when there is no simple mathematical model
- for highly nonlinear processes
- if the processing of (linguistically formulated) expert knowledge is to be performed

The employment of Fuzzy Control is no good idea if:

- conventional control theory yields a satisfying result
- an easily solvable and adequate mathematical model already exists
- the problem is not solvable

The employment of Fuzzy Control is appropriate mostly for <u>REAL TIME</u> applications.

Fuzzy Logic Applicability

Some Examples

- Automatic control of dam gates for **hydroelectric-power plants**
- Simplified control of **robots**
- **Camera aiming** for the telecast of sporting events
- Efficient and stable control of **car-engines**
- Cruise-control for **automobiles**
- Recognition of handwritten symbols with **pocket computers**
- Recognition of motives in pictures with **video cameras**
- Automatic motor-control for **vacuum cleaners** with recognition of surface condition and degree of soiling
- Back light control for **camcorders**
- Compensation against vibrations in **camcorders**
- Single button control for **washing-machines**
- Controlling of **subway systems** in order to improve driving comfort, precision of halting and power economy
- Improved fuel-consumption for **automobiles**
- Improved sensitiveness and efficiency for **elevator control**