

FFR125, FIM760

Autonomous agents

LP III-IV, 2008

Reading guidance 2008-02-29:

Literature:

1. **Wahde, M.:** *An introduction to autonomous robots* (lecture notes). [MW]
2. **Xie, M. --** *Fundamentals of robotics - linking perception to action*. [MX]
3. Various scientific papers (web links or printouts will be made available during the course).

Lecture 12: Control system of robots II.

MX 221-279:

- 5.3 Control elements; *important*
 - 5.3.1 Power switches; *important*
 - 5.3.2 Power drives; *important*
 - 5.3.3 Digital motion controllers; *important*
 - 5.4 Sensing elements; *important*
 - 5.4.1 Generic sensing principle; *important*
 - 5.4.2 Safety sensors; *briefly*
 - 5.4.3 Motion sensors; *important*
 - 5.4.4 Force/torque sensors; *important*
 - 5.4.5 Tactile sensors; *briefly*
 - 5.5 Control system design
 - 5.5.1 Issues; *important*
 - 5.5.2 Planning of desired output; *briefly*
 - 5.5.3 A robot's system dynamics; *important (especially 5.5.3.3)*
 - 5.5.4 Sensory feedback; *important*
 - 5.5.5 Control algorithms and performance; *briefly*
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