FFR125, FIM760 Autonomous agents

LP III-IV, 2008

Reading guidance 2008-03-04:

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 13: Information system of robots:

MX 303-374:

- 6.1 Introduction; *briefly*
- 6.2 Imitating the brain; briefly
- 6.3 Imitating the mind; briefly
 - 6.3.1 Autonomous actors or agents; briefly
 - 6.3.2 Autonomous behavior; briefly
 - 6.3.3 Computational tasks; *important*
- 6.4 Data-processing hardware
 - 6.4.1 Digital computers; important
 - 6.4.2 Microprocessors; *important*
 - 6.4.3 Micro-controllers; *important*
- 6.5 Data-processing software
 - 6.5.1 Programming; briefly
 - 6.5.2 Multi-tasking; important
 - 6.5.3 Real-time operating systems; briefly
- 6.6 Data storage and retrieval; briefly
- 6.7 Data interfacing and communication
 - 6.7.1 Basic concepts; briefly
 - 6.7.2 D/A converters; briefly

- 6.7.3 A/D conversters; *briefly*6.7.4 Parallel I/O; *briefly*6.7.5 Serial I/O; *briefly*6.7.6 Programmable timers; *important*