FFR125, FIM760 Autonomous agents

LP III-IV, 2008

Reading guidance

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).

Preliminary reading program:

(quarter.week)

Note: Theory and simulations will be covered in the 3rd quarter. Robot construction and additional simulations will be the topics of the 4th quarter.

Lecture 7.1: Behavior-based robotics: Generating robot behaviors

MW p. 39-52,

- 3.1 Approaches to machine intelligence; *important*
- 3.2 Behavior-based robotics; *important*
- 3.3 Generating behavior; *important*

Lecture 7.2: Evolutionary robotics: Evolving basic behaviors,

MW p. 53-74.

- 4.1 Introduction and motivation; *important*
- 4.2 Issues in evolutionary robotics; *important*
- 4.3 Evolving single behaviors; *important*
- 4.4 Evolving behaviors with ERSim; important