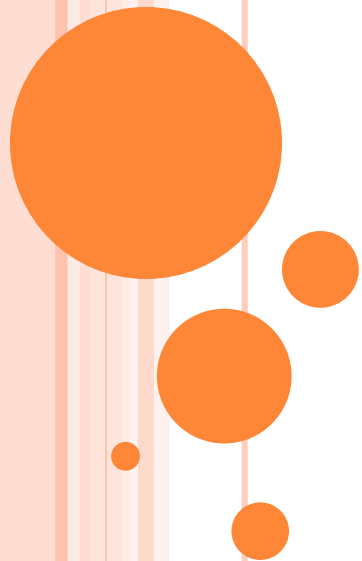


INTELLIGENT SYSTEMS

LECTURE 1

Ph. D. Lect. Horia Popa Andreescu
2012-2013 3rd year, semester 6



GENERAL DESCRIPTION

- Optional lecture
- 1 semester
- 14 lectures (placed in 10 weeks). For the first 7 weeks, 1 lecture and two labs, in that order.
- 4 labs of 1 hour / semigroup kept as 7 labs of 2 hours once every 2 weeks (same observation as for the lecture)
- Written exam
- 2 Lab projects
- Extra credits opportunities
- The students who want to take some projects for lab presences have to come in the first two weeks to be assigned to the projects and discuss what they have to do.

BIBLIOGRAPHY

- [GR] J. Giarratano, G. Riley - Expert Systems: Principles and Programming, PWS Pbs. Comp., ITP, 4th edition, 2005
- [BCG] F.L. Bellifemine, G. Caire, D. Greenwood – Developing Multi-Agent Systems with JADE, Wiley, 2007
- [W1] Mark Watson – Practical Artificial Intelligence Programming With Java AI 3rd ed., 2008
- [C] D. Cârstoiu – Sisteme Expert, Editura ALL, București, 1994
- [M] A. Martinoli - Distributed intelligent systems and algorithms laboratory DISAL <http://jahia-prod.epfl.ch/page-32632-en.html>

INTELLIGENT SYSTEMS

- What can be included in a course about Intelligent Systems:
- Expert systems
- Multi agent systems
- Natural inspired based systems:
 - Swarm intelligence, Ant colony optimisation,
 - Genetic algorithms
- Robotics:
 - Machine learning
 - Collective movements
 - Distributed sensing and action