

Multi-Agent Systems

– Syllabus –

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“Web Intelligence” Master — October 2015

Content

- Existing models defining multi-agent oriented programming paradigm: Agent, Interaction, Environment, Organisation Models
- Existing programming languages and platforms supported by these models
- Special focuses on:
 - A Multi-Agent Oriented Programming Approach and Platform
 - Multi-Agent Based Simulation

Objective

- To get a brief overview of the multi-agent systems research domain
- To understand the problems, the questions that are addressed in this domain
- To practice existing multi-agent technologies
- To acquire some skill in multi-agent oriented programming

“Web Intelligence” Master, October 2015

2 / 6

Timings

- October 9, 2015:
 - 8h00-10h00: Introduction, Multi-Agent Programming, *JaCaMo* Platform
 - 10h00-12h00: Agent Oriented Programming – Agent models
- October 23, 2015:
 - 8h00-10h00: Multi-Agent Based Simulation
 - 10h00-12h00: Agent Oriented Programming – Practical Work on *JaCaMo* [Agent]
- November 13, 2015:
 - 8h00-12h00: Distributed Problem Solving
- November 27, 2015:
 - 8h00-12h00: Interaction Oriented Programming – Interaction models

Timings (Continued)

- December 18, 2015:
 - 8h00-10h00: Environment Oriented Programming – Environment models / Organisation Oriented Programming – Organisation models
 - 10h00-12h00: Environnement Oriented Programming / Organisation Oriented Programming – Practical Work *JaCaMo* [Environment,Organization]
- January 8, 2016:
 - 8h00-12h00: Project Assistance
- January 29, 2016:
 - **8h00-10h00: Project Defense**
 - **10h00-12h00: Written Exam / Evaluation of Theoretical Work.**

Grading Policy

- Practical Work (*PW*)
- Written Exam (*WE*)
- Grade = $(PW + WE)/2$