

Multi-Agent Systems

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Objective

- ▶ Brief overview of the multi-agent systems research domain
- ▶ Understanding of the problems, the questions that are addressed in this domain
- ▶ Use of existing multi-agent technologies
- ▶ Acquire some skill in multi-agent oriented programming



Content

- ▶ Basic existing models grounding multi-agent oriented programming: Agent, Interaction, Environment, Organisation Models
- ▶ Existing programming languages and platforms supported by these models
- ▶ Special focus on *Self-Organisations vs Controlled Coordination*



Timings

- ▶ 12/11/08:
 - ▶ 8h00-10h00: Introduction, Multi-Agent Programming, *JaCaMo*
 - ▶ 10h00-12h00: Agent Oriented Programming: Agents' models & *Jason*
- ▶ 12/11/22:
 - ▶ 8h00-10h00: Agent Oriented Programming: Practical Work on *JaCaMo/ Jason*
 - ▶ 10h00-12h00: Distributed Problem Solving
- ▶ 12/11/23:
 - ▶ 8h00-10h00: Distributed Problem Solving: Practical Work
 - ▶ 10h00-12h00: Distributed Problem Solving: Practical Work



Timings (Continued)

- ▶ 12/12/06:
 - ▶ 13h30-15h30: Environnement Oriented Programming: Environments' models & CArtaGO
 - ▶ 15h30-17h30: Environnement Oriented Programming: Practical Work on JaCaMo/CArtaGO
- ▶ 12/12/07:
 - ▶ 8h00-10h00: Organisation Oriented Programming: Organisations' models & MOISE
 - ▶ 10h00-12h00: Interaction Oriented Programming: Interactions' models
- ▶ 12/12/14:
 - ▶ 8h00-10h00: Organisation Oriented Programming: Practical Work JaCaMo/MOISE
 - ▶ 10h00-12h00: Interaction Oriented Programming: Practical Work JaCaMo



Timings (Continued)

- ▶ 13/01/11:
 - ▶ 8h00-10h00: Self-Organisation
 - ▶ 10h00-12h00 : Practical Work on Self-Organisation



Grading Policy

- ▶ Practical Works (PW)
- ▶ Grade = $(\sum_{i=1}^{i=n} PW_i)/n$

