Multi-Agent Oriented Programming
– Syllabus –

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CPS2 M1 — Winter 2019

Objective

- To get a brief overview of the programming of open and decentralized systems using a multi-agent oriented perspective
- To understand the problems, the questions that are addressed in the multi-agent domain
- To practice existing multi-agent technologies
- To acquire some skill in multi-agent oriented programming
- To provide the basis on which *Coordination Models* can be developed (CPS2 M2)

Content

- Existing models defining multi-agent oriented programming approach:
  - Agent models,
  - Environment models,
  - Organisation Models,
  - and Interaction models.
- Existing programming languages and platforms supported by these models
- Special focus on :
  - Open and decentralized AI Systems
  - Multi-Agent Based Simulation (MABS)

Timings

- January 18, 2019 (OB):
  - 9h00-12h00: Introduction to Multi-Agent Oriented Programming (MAOP), *JaCaMo* Platform [S. 221]
- January 25, 2019 (OB):
  - 8h00-12h00: Programming Open Decentralized AI Systems [S. 223]
- February 01, 2019 (OB):
  - 8h00-12h00: Programming Open Decentralized AI Systems [S. 223]
- February 08, 2019 (OB):
  - 8h00-12h00: Programming Open Decentralized AI Systems [S. 221]

Timings (Continued)

- February 15, 2019 (FB):
  - 9h00-12h00: Multi-Agent Based Simulation (MABS) [S. 223]
- March 01, 2019 (FB):
  - 8h00-12h00: Multi-Agent Based Simulation (MABS) [S. 223]
- March 08, 2019 (FB):
  - 8h00-12h00: Multi-Agent Based Simulation (MABS) [S. 223]
- March 15, 2019 (FB):
  - 8h00-12h00: Multi-Agent Based Simulation (MABS) [S. 223]

Grading Policy

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