

Advanced Techniques in Artificial Intelligence

Curso 2021-2022

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Grado en Ingeniería en Informática

1. Final words
2. Student feedback survey
3. Final remarks

Goals

- Intelligent Agents
- Multi-agent Systems
- Planning
- To develop multi-agent systems
 - Labs & assignments:
 - JASON (Java version of AgentSpeak)
 - Final Assignment:
 - JGOMAS (Game Oriented Multiagent System based on JADE/JASON)
- Introduction to AI research

Motivation

- (Huhns & Singh 1994) ... “creating a system that interconnects separately developed collaborative agents, thus enabling the ensemble to function beyond the capabilities of any of its members”.
- $\text{value}(\sum \text{agent}_i) > \max(\text{value}(\text{agent}_i))$

- Final remarks
 - Just classical planning ... :-P
 - Where is AI?
 - Deep Learning
 - Reinforcement Learning
 - Machine learning ...
 - *For NLP, Vision, Robotics, ...*
 - From humans teaching computers ...
 - To computers teaching themselves!
 - Deloitte's report 2017: *“Machine learning (ML), a core element of artificial intelligence, will progress at a phenomenal pace this year. But this will be from a low base. As impressive as it is today, in 50 years’ time the ML abilities of 2018 will be considered baby steps in the history of this technology.”*

- Final remarks



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