Organization

Lecturers

Prof. Dr. Knut Hinkelmann

Prof. Dr. Holger Wache

Module Objective: Supporting Knowledge-Intensive Processes

- After completion of this module, the participants
  - will be able to assess which kind of knowledge representation and reasoning is adequate
  - are able to develop appropriate knowledge-based systems.
  - can value the advantages of knowledge-based systems with respect to their costs.
  - know Business Intelligence techniques to support business decisions with facts.
  - know approaches to turn data into knowledge that helps to make the right decisions.

Module Content

- Introduction: Knowledge in processes
- Decision Tables
- Rules
  - Textual represented rule (i.e. Horn clauses)
  - Forward and backward chaining
  - Data-driven and Goal-oriented
  - Negation-as-failure
- Object-centred Systems
  - F-Logic
- Fuzzy Logic
- Business Intelligence & Data Warehouse
- Reporting and Data Analysis
- Machine Learning: Learning Decision Trees
- Case-Based Reasoning
- Neuronal Networks

Module Organization

- Lectures: presentations, discussions, exercises
- Assignments/homework
  - Readings to prepare lectures
  - Exercises during weeks
- Credits: 6 ECTS

Module Schedule

	Timeslots	Room	
March			
Monday 4th	2pm - 6pm	AB2	Prof. Wache/Hinkelmann
Tuesday 5th	10am - 1pm	AB2	Prof. Holger Wache
Monday 18th	2pm - 6pm	AB2	Prof. Holger Wache
Tuesday 19th	10am - 1pm	AB2	Prof. Holger Wache
April			
Monday 8th	2pm - 6pm	AB2	Prof. Holger Wache
Tuesday 9th	10am - 1pm	AB2	Prof. Holger Wache
May			
Monday 6th	2pm - 6pm	AB2	Prof. Knut Hinkelmann
Tuesday 7th	10am - 1pm	AB2	Prof. Knut Hinkelmann
Monday 13th	2pm - 6pm	AB2	Prof. Knut Hinkelmann
Tuesday 14th	10am - 1pm	AB2	Prof. Knut Hinkelmann
June			
Monday 3rd	2pm - 6pm	AB2	Prof. Knut Hinkelmann
Tuesday 4th	10am - 1pm	AB2	Prof. Knut Hinkelmann

Module Information

Website

http://didattica.cs.unicam.it/doku.php?id=didattica:magistrale:kebi:ay_1819:main

Literatur

- No Books
- Reading material will be provided for download