



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: 9 ECTS

Module Schedule

	Timeslots	Lectures	Lecturer
March			
April			
Monday 20th	2pm - 6pm	4	Prof. Holger Wache / Prof. Knut Hinkelmann
Tuesday 21st	9am - 1pm	4	Prof. Knut Hinkelmann
Monday 27th	2pm - 6pm	4	Prof. Holger Wache
Tuesday 28th	9am - 1pm	4	Prof. Holger Wache
May			
Monday 4th	2pm - 6pm	4	Prof. Holger Wache
Tuesday 5th	9am - 1pm	4	Prof. Holger Wache
Wednesday, 6th	9am - 1pm	4	Prof. Holger Wache
Monday 11thd	2pm - 6pm	4	Prof. Knut Hinkelmann
Tuesday 12th	9am - 1pm	4	Prof. Knut Hinkelmann
Wednesday, 13th	9am - 1pm	4	Prof. Knut Hinkelmann
Monday 18th	2pm - 6pm	4	Prof. Knut Hinkelmann
Tuesday 19th	9am - 1pm	4	Prof. Knut Hinkelmann
Wednesday 20th	9am - 1pm	4	Prof. Holger Wache
Monday 25h	2pm - 6pm	4	Prof. Knut Hinkelmann
Tuesday 26th	9am - 1pm	4	Prof. Knut Hinkelmann
Wednesday 27th	9am - 1pm	4	Prof. Knut Hinkelmann

Module Information

Website

http://didattica.cs.unicam.it/doku.php?id=didattica:magistrale:kebi:ay_1920:main

Literatur

- ◆ No Books
- ◆ Reading material will be provided for download