FID3013 Knowledge Representation and Reasoning Strategies in Intelligent Systems 15.0 credits

Kunskapsrepresentation och resonemangsstrategier i intelligenta system

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for FID3013 valid from Spring 2014

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

ID3007 Research in Artificial Intelligence 15.0 credits

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The course explores theories of knowledge representation including First-Order Logic. The course also explores reasoning strategies and systems emphasising Horn Clauses, and Procedural and Object-oriented control of reasoning with facts and rules.

After the course, the students shall be able to discuss and apply theories for knowledge representation and reasoning strategies in intelligent systems.

The student must be able to explain knowledge representation and reasoning strategies, such as first-order logic and reasoning with rules, must apply these in own research. The results must be presented in a journal publication in an international well-known journal, such as Elsevier Information Science or similar.

Course contents

The course is divided in knowledge representation and reasoning strategies, which are integrated in final work. These parts are graded via six seminars and a conference/journal paper.

Disposition

The course is carried out via literature studies using problem-based learning and via application of theories in a paper.

Course literature

Knowledge Representation and Reasoning, 1st Edition

Author(s) :

Brachman & Levesque

Release Date: 17 Jun 2004

Imprint: Morgan Kaufmann

Print Book ISBN : 9781558609327

eBook ISBN : 9780080489322

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Pages: 381

A book that covers the course goals

Equipment

Computer

Examination

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Six well-performed seminars and a paper published via a conference or journal addressing knowledge representation and reasoning strategy in own research.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.