Logic and Constraint Programming
General Info & Introduction

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Who I am

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Schedule

Mon	Tue	Wed	Thu	Fri
	9-12	14-16		

Contents

- Logic programming: basic concepts and Prolog language

- Rule-based programming: Drools

- Constraint programming: Minizinc

Teaching material

- Stuart J. Russell and Peter Norvig. Artificial Intelligence A Modern Approach. Third Edition. Pearon, 2016.

- Patrick Blackburn, Johan Bos, Kristina Striegnitz. Learn Prolog Now! 2001

- Tutorial of Drools, Minizinc.

- Course's slides

- Lecture notes, papers and slides may be given by the teacher for studying and for exercises

Final exam

- Programming test:
    - on the exam date a programming test takes place, using the languages and tools introduced in the course
    - during the course in itinere tests take place; in case they are evaluated positively, they replace the programming test of the exam date

- Realisation of a project using one or more languages and software tools with a presentation

The Hard Life of Programmers (and Students)

Questions?

Why LCP in IAS?

Intelligent and Adaptive Systems (IAS) needs to:

- take **decisions** according to their **knowledge**

So, to program IAS, we need to:

- represent system's **knowledge**
  - facts and their relationships (i.e., rules, constraints)

- query the knowledge base to support autonomic **decisions**
  - inference of an answer to a query, or solution of a CSP

Nowadays, other AI supports are available, e.g. Machine Learning

- LCP is programmable and verifiable

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