Section 1.01 Syllabus

The course will be heavily based on the book "Artificial Intelligence - A Modern Approach", by Stuart Russel and Peter Norvig. As the book covers at least a 2-semester course, we will only cover the basics and some selected topics, as follows (with the relevant book chapters listed in tandem):

1. What is AI? Intelligent agents (chaps. 1, 2)
2. Problem solving and search + game playing (chaps. 3, 4, 5)
3. Knowledge and Reasoning (chaps. 6, 7, 9.1-9.6, 10.1-10.6, 10.8)
4. Overview of planning (gloss on chapters 11, 12, 13)*
5. Handling uncertainty (gloss on chapters 14, 15.1-15.4)
7. Perception - computer vision (part of chapter 24)*

Chapters marked with an asterisk (*) are optional - depend on time constraints.

Note that the course does not include study of an "AI-type", programming language. In order to handle the homework assignments, good knowledge of at least one programming language is assumed, and in addition some of the assignments may be easier to do using a symbolic language (such as LISP, SCHEME, or Prolog).

Section 1.02 Bibliography


Section 1.03 Course requirements

There will be approximately 4 programming assignments + 2 theoretical assignments, comprising 60 percent of the course grade. In addition, there will be two mini-exams (BOHAN) one approximately at mid-term, another at the end of the semester, each worth 20 percent of the final grade.