Introduction to artificial intelligence

Luis Brena

1 What is the program about?

It's about create intelligent organizations. The intelligence that we are going to study is collective intelligence. People working together in ways that seem intelligent.
Technology enable collective intelligence, like google and Wikipedia.
So the core question of the course is how can people and computers be connected so that -collectively- they act more intelligently than any person, group or computer has ever done before. There are two ways to answer:

- Connecting people with each other in new ways,so they can act more intelligently as a group.
- Connecting people to computers that have more artificial intelligence.

The Topics in this module will be:

- What is AI?
- How to use AI strategically

The outcomes:

- Know about AI in business.
- Strategic and technical factors of AI in business.
- Have an strategic plan
- Have a broader knowledge of AI in business.
- Won't be afraid of AI.

2 Definition of AI

2.1 Pratick Winston definition

Turing's test gave a different approach to the definitions, because the term is difficult to define. The term is a suitcase term because it comprehends many works into it.
The first idea was problem reduction. It emerged from the AI research. If you get the representation don't you have all. Models of perception and actions. The model is valuable because it behaves like the real thing. In general thing the models are representations.
AI is representations that support models of thinking, perception, and action. It is like a model of the real thing which supports an action.
The real value of the representation is that it gives constraint. AI is about architectures that deploy methods enabled by constraints exposed by representations that support models of thinking, perception, and action.

The technology about of the second wave began in the 80s. Some kind of expertise could be capture in a series of rules. Rule based systems are the fundamental of ai now and which is going to became the next decade.
In about mid 80s, a lot of start-up fails. Programs which manages work efficiency. The third way in 2010. Has been enable by a lot of data and computer. Deep neuronal networks. was discussed in the 70s. Backwards propagation and gradient descent. They do amazing work but they don't think like persons. We need more that this offered us.
The programs work because many methods are used combined into some program.