Lecture 3 ()

1 Acting Rationally - Rational Agent

1. A rational agent maximises its expected utility
2. It acts to achieve the best (expected) outcome
3. Characteristics of percepts, environment, action space dictate rational techniques
4. Objective functions and costs lead to mathematical formuation of the agent's choices

2 Strong AI vs Weak AI

2.1 Weak AI Hypothesis

Can machines act intelligently? Passing the Turing test isn't enough

2.2 Strong AI Hypothesis

Can machines really think? Learning by simulation doesn't imply thinking

3 How to AI?

1. Modelling
2. Inference: run algorithms on the model
3. Learning

4 Different AI Models

1. State-based models
2. Variable-based models
3. Decision-making models
4. Reflex models

5 History of AI

refer the slides for the same