CSCI 100 Reading Assignment
Artificial Intelligence: Foundations of Computational Agents

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http://artint.info/html/ArtInt.html

Read the following chapters.
Answer the chapter questions below by Thursday April 24th.

1. Artificial Intelligence and Agents
1.1 What is Artificial Intelligence?
- What is a computational agent?
- What is the scientific goal of AI research?

1.1.1 Artificial and Natural Intelligence
- What are the 3 main sources of human intelligence?

1.2 A Brief History of AI
1.2.1 Relationships to Other Disciplines
- Explain how the question, "Can computers think?" is analogous to "Can airplanes fly?".

1.3 Agents Situated in Environments
- Explain the relationship between an intelligent agent and its environment.
- What are an agent's inputs and outputs?

1.4 Knowledge Representation
- What must artificial intelligence systems be designed to do in order solve problems?
- What is knowledge in terms of problem solving within AI?

1.4.1 Defining a Solution
- What is a probable solution?

1.4.3 Reasoning and Acting
- What are the 3 aspects of computation?

1.8 Review
2 Agent Architectures and Hierarchical Control
2.1 Agents
- Why must an agent have preferences?
- How do agents receive information?

2.6 Review
3 States and Searching
3.1 Problem Solving as Search
- How is an AI search different from searching for your keys or searching the web?
- What is heuristic knowledge?

6 Reasoning Under Uncertainty
6.1 Probability
- What is subjective probability?
- What is probability theory?

7 Learning: Overview and Supervised Learning
7.1 Learning Issues
- What is a problem of learning?
- How does an agent use its experiences to learn?

7.9 Review